Notice of Preparation and Initial Study

Los Angeles International Airport (LAX) Secured Area Access Post Project

Lead Agency:

Los Angeles World Airports

One World Way, Room 218
Los Angeles, California 90045

Prepared by:

CDM Smith

111 Academy Way, Suite 150
Irvine, California 92617

April 20, 2017

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California Environmental Quality Act
NOTICE OF PREPARATION
FOR AN ENVIRONMENTAL IMPACT REPORT

DATE: April 20, 2017

TO: Office of Planning and Research – State Clearinghouse, Responsible or Trustee Agency, and Interested Parties

FROM: City of Los Angeles
Los Angeles World Airports
One World Way, Room 218
Los Angeles, California 90045

PROJECT NAME: Los Angeles International Airport (LAX) Secured Area Access Post (SAAP) Project

PROJECT LOCATION/ADDRESS: The project site is located within the center portion of the west side of LAX (see **Figure 1**). LAX is situated within the City of Los Angeles, an incorporated city within Los Angeles County. The project site is in the western portion of LAX parallel to and south of World Way West, west of the Central Terminal Area, north of Imperial Highway, and east of Pershing Drive (see **Figure 2**).

COMMUNITY PLANNING AREA: LAX Plan

COUNCIL DISTRICT: 11 – Bonin

DUE DATE FOR PUBLIC COMMENTS: May 22, 2017

The Los Angeles World Airports (LAWA), a propriety department of the City of Los Angeles, will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below (proposed project). LAWA, as the Lead Agency, must prepare and distribute a Notice of Preparation (NOP) after it decides to prepare an EIR. LAWA, through the NOP, solicits participation in determining the scope of the EIR from responsible public agencies (those which may have discretionary approval authority over the proposed project or an aspect of it), trustee agencies (agencies with jurisdiction over a natural resource held in public trust that the project may affect), and from local governments, regional agencies, private individuals, and organizations which may have concerns about the proposed project.

The project description, a list of agencies and city entities which may be required to take actions associated with the proposed project, and the environmental resources that may be affected by the proposed project are identified below. A copy of the Initial Study prepared for the proposed project is available during the 30-day NOP review period at LAWA's website at: http://www.OurLAX.org and at the locations listed below:

- LAWA, One World Way, Room 218, Los Angeles, California 90045
- Westchester-Loyola Village Branch Library, 7114 West Manchester Avenue, Los Angeles, California 90045
- El Segundo Public Library, 111 West Mariposa Avenue, El Segundo, California 90245
- Playa Vista Branch Library, 6400 Playa Vista Drive, Los Angeles, California 90094

PROJECT DESCRIPTION: The purpose of the proposed project is to construct a new SAAP to provide a fully functional, secured access point onto the Airport Operations Area (AOA) on the west side of LAX. A new SAAP is needed on the west side to replace SAAP 5 which was displaced by the Midfield Satellite Concourse (MSC) North Project, and SAAP 21 which will be removed to enable the full build-out of the West Aircraft Maintenance Area (WAMA). The proposed SAAP would be the sole full-access SAAP on World Way West after the existing SAAP 21 is taken out of service in May 2017.[1] After SAAP 21 closes, access to the AOA will continue to be provided by several other full-access SAAPs that are located around the AOA perimeter. The proposed replacement SAAP would accommodate all types of vehicles that require access to the AOA (construction, aircraft service vehicles, vendors, LAWA, etc.). Its elements would be the prototype for any future SAAPs and/or improvements to existing SAAPs at LAX. The new SAAP facility would have a land footprint of approximately 1,200 feet by 150 feet, consisting primarily of paved areas with various pieces of equipment to control access (gates, traffic lights, signage, vehicle arrest systems, security fencing, etc.), vehicle inspection equipment (license plate readers, under-vehicle scanners, etc.), and facilities and shelter for inspection staff, including two canopy structures spanning the width of the first and last inspection station, and two guard station buildings, one at each of the first and last inspection stations. Each guard house would be approximately 350 square feet and would include monitoring equipment and a restroom facility. Construction of the new SAAP would require the demolition and removal of the former Continental Airlines (CAL) General Office (GO) Building, which is vacant, and associated facilities. The proposed project would take approximately 13 months for demolition and construction. Construction and demolition of the project may not be continuous; the 13 months of construction activity is estimated to occur in the timeframe between the fourth quarter of 2017 and the second quarter of 2020. The proposed project would only affect vehicles accessing the AOA. The project would not increase existing passenger capacity or the number of aircraft operations at LAX.

NECESSARY APPROVALS: The City of Los Angeles has principal responsibility for approving and carrying out the proposed project. Agencies and City entities which may be required to take actions associated with the proposed project include, but may not be limited to, the following:

- U.S. Department of Transportation Federal Aviation Administration
- South Coast Air Quality Management District
- LAWA Board of Airport Commissioners
- Los Angeles City Council
- City of Los Angeles Department of Building and Safety
- City of Los Angeles Department of Transportation
- City of Los Angeles Department of Cultural Affairs
- Other Federal, State, or local approvals, permits, or actions as may be determined necessary

[1] After SAAP 21 closes, some traffic that currently uses SAAP 21 would utilize other AOA access points, and other traffic would be redirected to a temporary AOA access point located off of Maintenance Way, southwest of the proposed project site. The temporary SAAP would not provide full access to all vehicles. Rather, it would only provide access to LAWA personnel and tenants; no construction vehicle access would be provided. Development of the temporary AOA access point at LAX would occur independently of (i.e., with or without) the proposed project.

ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED: Impacts related to cultural resources and biological resources, and their related cumulative impacts have been found to be potentially significant and will be analyzed in an EIR prepared for the proposed project. In addition, the potential for the proposed project to result in direct and cumulative impacts to tribal cultural resources will be evaluated in the EIR. The EIR will also address energy implications of the proposed project, with emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy pursuant to CEQA Guidelines Appendix F. The Initial Study found that the proposed project would have no impact, or less than significant impacts, on all other environmental resources (i.e., aesthetics, agriculture and forestry resources, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems). No further analysis of these resource areas is planned for the EIR.

NEXT STEPS: LAWA is requesting input during the NOP 30-day public review period from interested government and quasi-government agencies, other organizations, and private citizens regarding the scope and content of environmental information to be included in the EIR. In the future, public agencies receiving this notice may need to use the EIR prepared by LAWA when considering their permits or other approvals for the proposed project.

Any public agencies that respond to this Notice are requested, at a minimum, to:

1. Describe significant environmental issues, reasonable alternatives and mitigation measures which they would like to have addressed in the EIR.
2. State whether they are a responsible or trustee agency for the project, explain why and note the specific project elements that are subject to their regulatory authority.
3. Provide the name, address and phone number of the person who will serve as their point of contact throughout the environmental review process for this project.

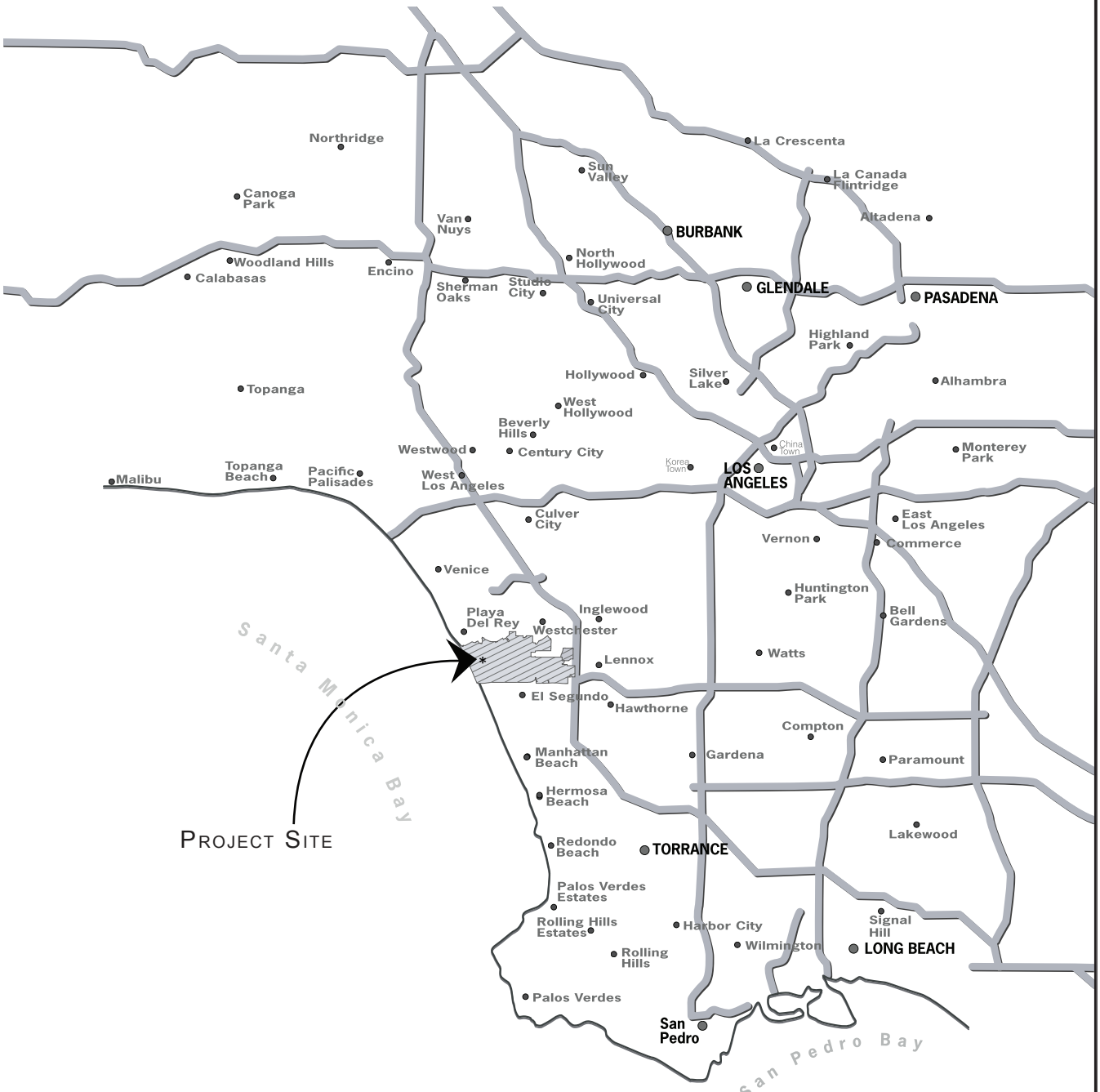
LAWA welcomes all comments regarding potential environmental impacts of the project and the issues to be addressed in the EIR. All comments will be considered in the preparation of the EIR. **Written comments must be submitted to the contact and office noted below no later than 5:00 p.m. on May 22, 2017.** On receipt of comments on the NOP, LAWA will consider those comments and prepare the Draft EIR. The Draft EIR will analyze the significant adverse impacts from the proposed project, identify feasible potential mitigation measures, and analyze feasible alternatives to the proposed project that could reduce or avoid identified significant impacts while still achieving most of the basic project objectives.

Please direct your comments to:

Vinita Waskow
Los Angeles World Airports
One World Way, P.O. Box 92216
Los Angeles, California 90009-2216
(800) 919-3766

Comments can also be submitted on LAWA's website at http://www.OurLAX.org.

Signature: _____
Evelyn Quintanilla
Title: Chief of Airport Planning II
Date: April 17, 2017



Source: CDM Smith, October 2016.
Prepared by: CDM Smith, October 2016.

LAX Secured Area Access Post Project	Regional Location Map	Figure 1

Source: Los Angeles World Airports, July 2016.
Prepared by: CDM Smith, October 2016.

LAX Secured Area Access Post Project	Project Location Map	Figure 2

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Los Angeles International Airport (LAX)
Secured Area Access Post Project

Initial Study

1.0 INTRODUCTION

Los Angeles World Airports (LAWA) proposes a new Secured Area Access Post (SAAP) to provide a fully functional, secured access point onto the Airport Operations Area (AOA) on the west side of Los Angeles International Airport (LAX). The proposed new SAAP would be the sole full-access SAAP on World Way West and would replace SAAP 5, which was displaced in January 2016 by the Midfield Satellite Concourse (MSC) North Project,[2] and SAAP 21, which will be taken out of service by Phase 2 of the West Aircraft Maintenance Area (WAMA) Project in May 2017.[3,4] After SAAP 21 closes, access to the AOA will continue to be provided by several other full-access SAAPs that are located around the AOA perimeter. The proposed new state-of-the-art SAAP along World Way West would accommodate all types of vehicles that require access to the AOA (construction, aircraft service vehicles, vendors, LAWA, etc.). Its elements would be the prototype for any future SAAPs and/or improvements to existing SAAPs at LAX. Construction of the new SAAP would require the demolition and removal of the former Continental Airlines (CAL) General Office (GO) Building, which is vacant, and associated facilities.

The proposed project would relocate activities associated with an existing SAAP located on World Way West (i.e., SAAP 21) to a new location less than half a mile to the east. The new SAAP would incorporate state-of-the-art technologies for vehicle screening. The proposed project would affect the location and process by which vehicles accessing the AOA are screened, but would not result in an increase in the number or type of vehicles that would utilize the new facility. Existing operations at the new SAAP would be the same as at the existing SAAP (SAAP 21).[5]

The proposed project would relocate an existing security access post at LAX; the project would not affect the number of passengers served by the airport or the number or type of aircraft operations. Moreover, the proposed new SAAP would not have any adverse effect on passenger activity, aircraft activity, or aircraft movements. Vehicles currently enter the AOA through one of seven SAAPs. All

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2 City of Los Angeles, Los Angeles World Airports, Final Environmental Impact Report for Los Angeles International Airport (LAX) Midfield Satellite Concourse, (SCH2013021020), June 2014. The MSC North Project consists of a satellite concourse west of the Tom Bradley International Terminal that will include up to 11 aircraft gates. Construction of the MSC North Project is underway and is projected to be completed in November 2019.

3 City of Los Angeles, Los Angeles World Airports, Final Environmental Impact Report for Los Angeles International Airport (LAX) West Aircraft Maintenance Area Project, (SCH20122091037), February 2014. The WAMA Project, located south of World Way West and east of Pershing Drive, includes new aircraft parking and maintenance facilities in the western portion of LAX. The first phase of the WAMA Project was completed in 2016. The second phase of the WAMA Project (construction of a second maintenance hangar) is projected to begin in 2017 and be completed by 2018.

4 After SAAP 21 closes, some traffic that currently uses SAAP 21 would utilize other AOA access points, and other traffic would be redirected to a temporary AOA access point located off of Maintenance Way, southwest of the proposed project site. The temporary SAAP would not provide full access to all vehicles. Rather, it would only provide access to LAWA personnel and tenants; no construction vehicle access would be provided. Development of the temporary AOA access point at LAX would occur independently of (i.e., with or without) the proposed project.

5 Tomcheck, Pat, Los Angeles World Airports, Electronic Mail Message to Angelica Espiritu, Los Angeles World Airports, Subject: New SAAP Traffic Volume, January 20, 2017.

drivers that operate any type of vehicle on the AOA are required to undergo a minimum of eight hours of practical (behind-the-wheel) on-airport driver training and the successful completion of a qualifying written exam administered by the LAX Security Badge Office.[6] Rules governing driving on the AOA are very restrictive. Under all conditions, aircraft have the right-of-way over all vehicles and ground equipment. Drivers of the vehicles that would access the proposed new SAAP would be subject to these rules and requirements. Therefore, there would be no change to aircraft movements.

The proposed project would only affect vehicles accessing the AOA. The project would not increase existing passenger capacity or the number of aircraft operations at LAX.

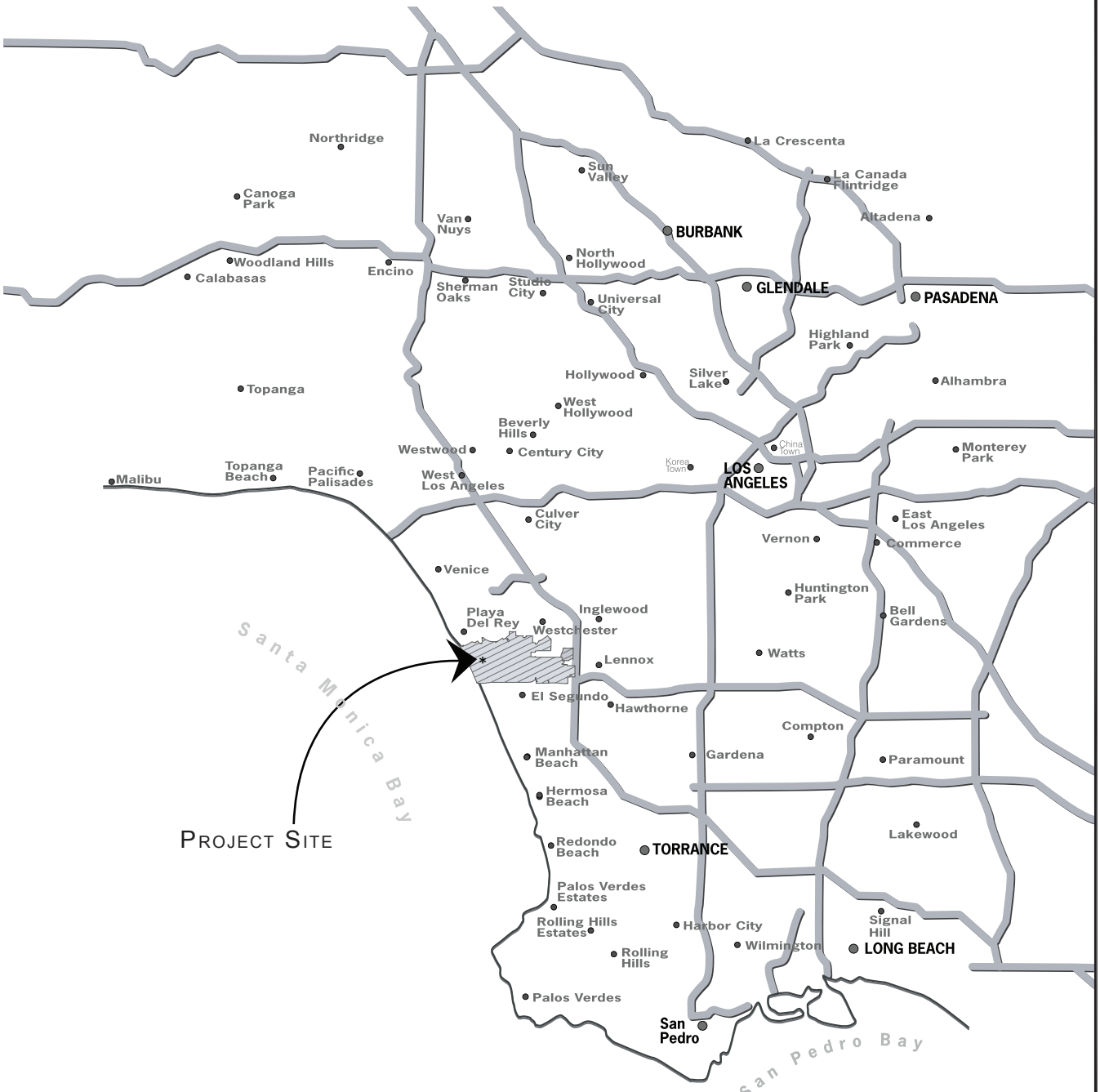
2.0 PROJECT LOCATION AND SURROUNDING USES

Regional Setting

As shown in **Figure 1**, 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 3,800 acres, and is situated at the western edge of the City of Los Angeles.

In the LAX vicinity, the community of Westchester is located to the north, the City of El Segundo is to the south, the City of Inglewood and unincorporated portions of Los Angeles County are to the east, and the Pacific Ocean lies to the west. Regional access to LAX is provided by Interstate 105 (I-105), which runs east-west and is located adjacent to LAX on the south, and the San Diego Freeway (Interstate 405 or I-405), which runs north-south and is located east of LAX. Access to the west side of the airport is via Imperial Highway and off Pershing Drive.

[6] City of Los Angeles, Los Angeles International Airport (LAX) Airport Police, LAX Airport Operations, LAX Restricted Area Driver Test Study Guide, January 2017.



Source: CDM Smith, October 2016.
Prepared by: CDM Smith, October 2016.

LAX Secured Area Access Post Project	Regional Location Map	Figure 1

Local Setting and Land Uses

The 4.1-acre project site is located within the western portion of LAX parallel to and south of World Way West (see **Figure 2**). The project site includes paved areas currently used for vehicle parking and the former CAL GO Building, which was formerly the general office building for Continental Airlines' Corporate Headquarters. In addition to the CAL GO Building, the original Continental Airlines facility at LAX included a maintenance base with six aircraft hangars and apron areas, a Training Center building, operations offices, shop buildings, commissary and in-flight kitchen facilities, and supporting infrastructure.[7] The CAL GO Building was built in 1963, with a new west entrance to the building added in 1974. Due to the age and disrepair of the CAL GO Building, it is uninhabitable and is now vacant.[8] The building contains hazardous materials (including asbestos containing materials [ACM], lead containing surfaces [LCS], mold, polychlorinated biphenyls [PCBs] and mercury.[9] In addition, the building is in poor condition, and the primary building systems (including electrical, HVAC [heating, ventilation, and air conditioning], plumbing, fire/life safety, and elevators) do not comply with current building codes.

The CAL GO Building is over 50 years old and is an example of Mid-century Modern corporate architecture. The building was constructed as the administrative headquarters for Continental Airlines during its peak years as an international airline, and is directly associated with the rapid growth and expansion of commercial aviation reflecting the period during which LAX became a major international airport. For these reasons, the CAL GO Building has been identified as potentially eligible for listing in the California Register of Historical Resources and/or as a Los Angeles Historic-Cultural Monument. The integrity threshold for listing in the National Register of Historic Places differs from the criteria for listing in the California Register. The CAL GO Building does not appear to be eligible for listing in the National Register of Historic Places due to the construction of an addition onto the west elevation, which has affected the integrity of the building.

[7] Incorporated by Reference: PCR Services Corporation, Draft Historic Resources Assessment Report: Continental Airlines Facilities, 7300 Maintenance Road (APN: 4129-026-903) and 7300 World Way West (APN: 4129-026-903), Los Angeles, Los Angeles County, California, September 2013.

[8] Incorporated by Reference: PCR Services Corporation, Draft Historic Resources Assessment Report: Continental Airlines Facilities, 7300 Maintenance Road (APN: 4129-026-903) and 7300 World Way West (APN: 4129-026-903), Los Angeles, Los Angeles County, California, September 2013.

[9] Incorporated by Reference: Ninyo & Moore, Hazardous Building Material Survey, Continental Airlines General Office Building, Chelsea Kitchen Basement, and Training Buildings, Los Angeles International Airport, 7270, 7300, and 7320 World Way West, Los Angeles, California, May 18, 2016.

Source: Los Angeles World Airports, July 2016.
Prepared by: CDM Smith, October 2016.

LAX Secured Area Access Post Project	Project Location Map	Figure 2

The land use setting around the project site is characterized by airport operations and aircraft maintenance facilities. Existing adjacent uses include: the LAX Fuel Farm and LAWA administrative offices/vehicle parking to the north and northwest, respectively; a remain overnight (RON) aircraft parking area to the east; the American Airlines (AA) Operations Support Facility (OSF), AA Engineering Building, United Airlines Maintenance Hangar, and Los Angeles Fire Department (LAFD) Fire Station 80/Aircraft Rescue and Fire Fighting Facility (ARFF) to the south; and the former CAL Training Building (vacant) to the west. The Los Angeles International Airport Plan (LAX Plan),[10] the City of Los Angeles General Plan Land Use Element that governs uses on LAX, designates the project site as Airport Airside. The corresponding LAX Specific Plan[11] designates this area as LAX-A Zone: Airport Airside Sub-Area.

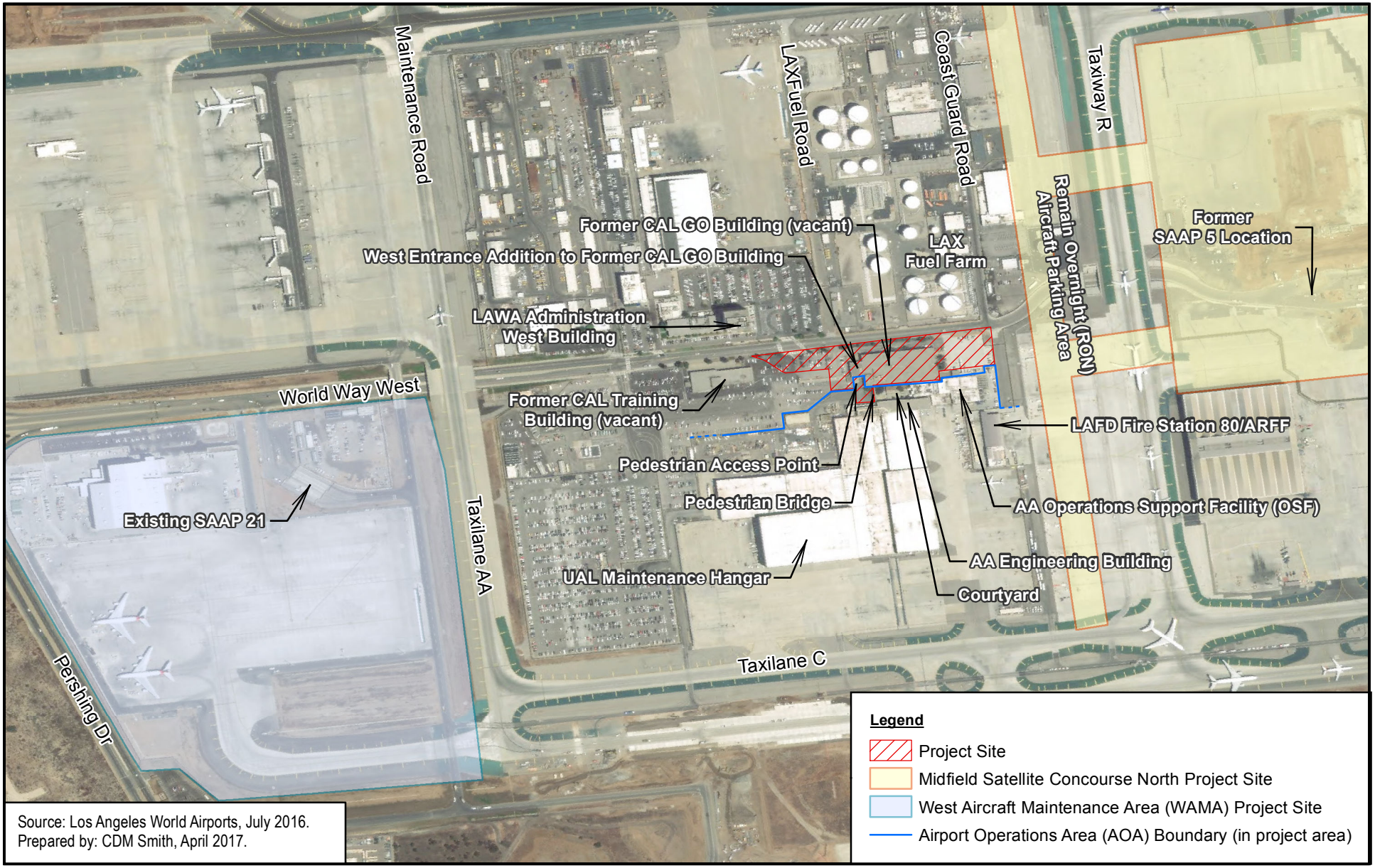
3.0 PROJECT DESCRIPTION

SAAP Facility

The proposed project is the construction of a new SAAP on the west side of LAX that would accommodate all types of vehicles that require access to the AOA (construction, aircraft service vehicles, vendors, LAWA, etc.). The new SAAP would be located parallel to and south of World Way West, near where the road will terminate at Coast Guard Road once the MSC North Project is completed (see Figure 2). Facilities and land uses surrounding the project site are shown on **Figure 3.** A graphic rendering and the layout of the proposed SAAP are provided in **Figures 4** and **5**, respectively. The new SAAP facility would have a land footprint of approximately 1,200 feet by 150 feet, consisting primarily of paved areas with various pieces of equipment to control access (gates, traffic lights, signage, vehicle arrest systems, security fencing, etc.), vehicle inspection equipment (license plate readers, under-vehicle scanners, etc.), and facilities and shelter for inspection staff, including two canopy structures spanning the width of the first and last inspection station, and two guard station buildings, one at each of the first and last inspection stations. Each guard house would be approximately 350 square feet (SF) and would include monitoring equipment and a single Americans with Disabilities Act (ADA)-compliant restroom. The guard houses would be single-story structures approximately 16 feet in height; the two canopies would be tall enough to provide 25 feet in clearance for trucks accessing the SAAP. New lighting associated with the proposed project would include security lighting on the new guard station buildings, canopy lighting, roadway lighting, and perimeter fence lighting along the last inspection station. Perimeter fence lighting would include either pole-mounted or fence-mounted LED fixtures matching existing foot-candle outputs. All external lights would be shielded and focused to avoid glare and prevent unnecessary light spillover.

[10] City of Los Angeles, Department of City Planning, LAX Plan, adopted December 14, 2004, last amended May 24, 2013. Available: http://planning.lacity.org/complan/specplan/pdf/LAXPLAN_AMENDED20130524_FINAL(SECURED).pdf.

[11] City of Los Angeles, Department of City Planning, Los Angeles International Airport (LAX) Specific Plan, adopted December 14, 2004, last amended June 14, 2016. Available: http://clkrep.lacity.org/onlinedocs/2013/13-0285-s3_ORD_184348_6-15-16.pdf.

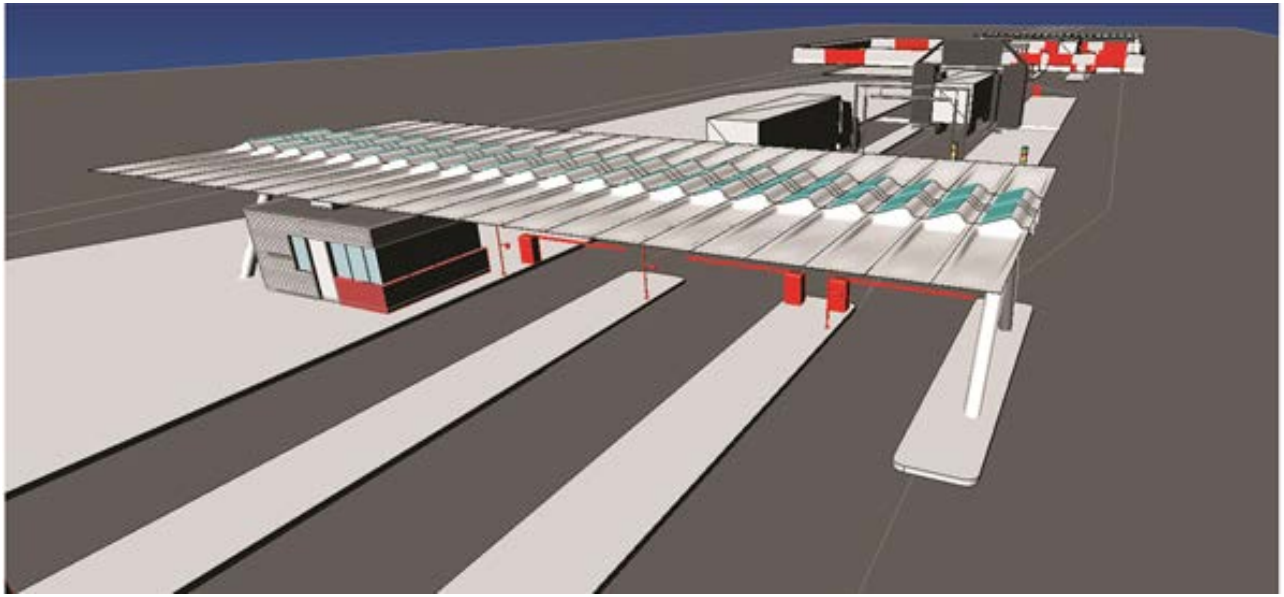


Source: Los Angeles World Airports, July 2016.
Prepared by: CDM Smith, April 2017.

LAX Secured Area Access Post Project

Project Site and Surrounding Land Uses

Figure
3

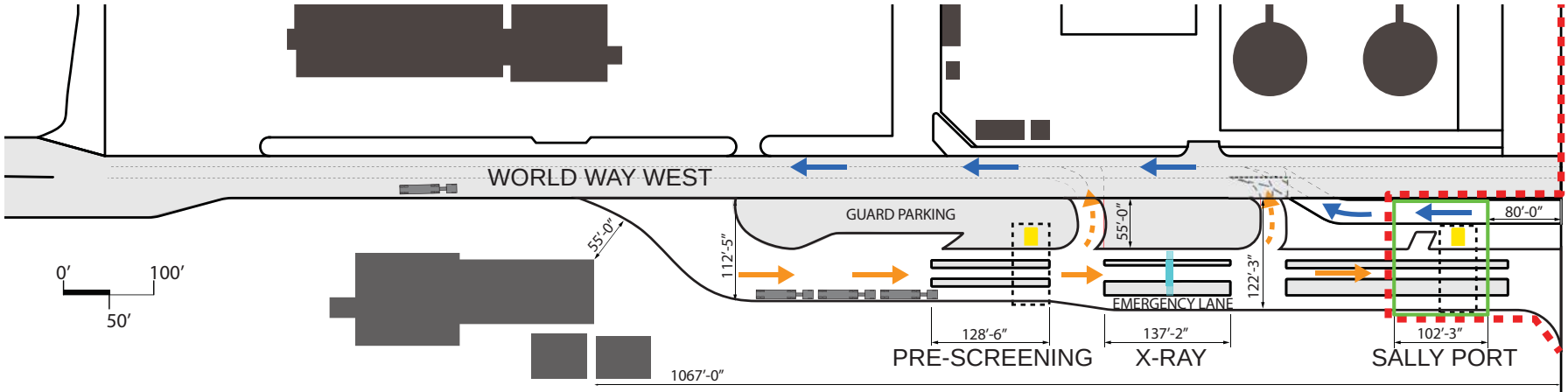


Source: Los Angeles World Airports, July 2015.
Prepared by: CDM Smith, October 2016.

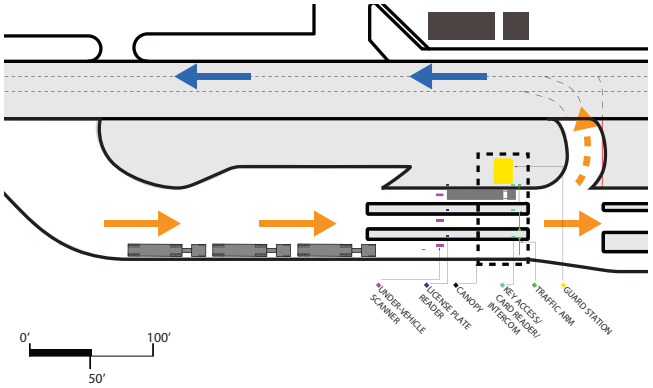
LAX Secured Area Access Post Project

Conceptual Rendering of Proposed SAAP

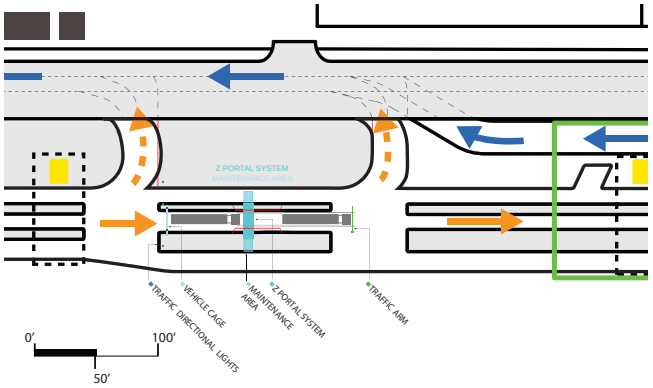
Figure
4



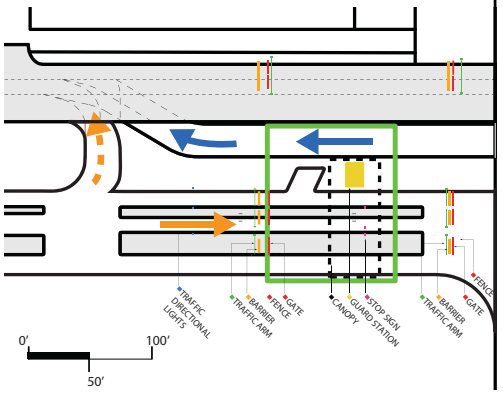
Proposed SAAP Layout



Station 1 – Pre-Screening



Station 2 – X-Ray Screening



Station 3 – Sally Port

LEGEND

- SAAP inbound traffic
- SAAP outbound traffic
- X-ray equipment
- Guard booth
- Exit for traffic denied access
- Canopy structure
- Sally port perimter

Source: Los Angeles World Airports, September 2015.
Prepared by: CDM Smith, January 2017.

LAX Secured Area Access Post Project	Proposed SAAP Layout	Figure 5

As shown in Figure 5, the proposed new SAAP would consist of three screening areas:

- Station 1 – Pre-Screening: card swipe; physical inspection of badges; guard and driver interactions; license plate reader; and cameras/scanners providing under-carriage, top view, and interior view of vehicles.

- Station 2 – X-ray Screening: selected vehicles would drive through an x-ray machine (back scatter technology would not require driver to exit the vehicle).

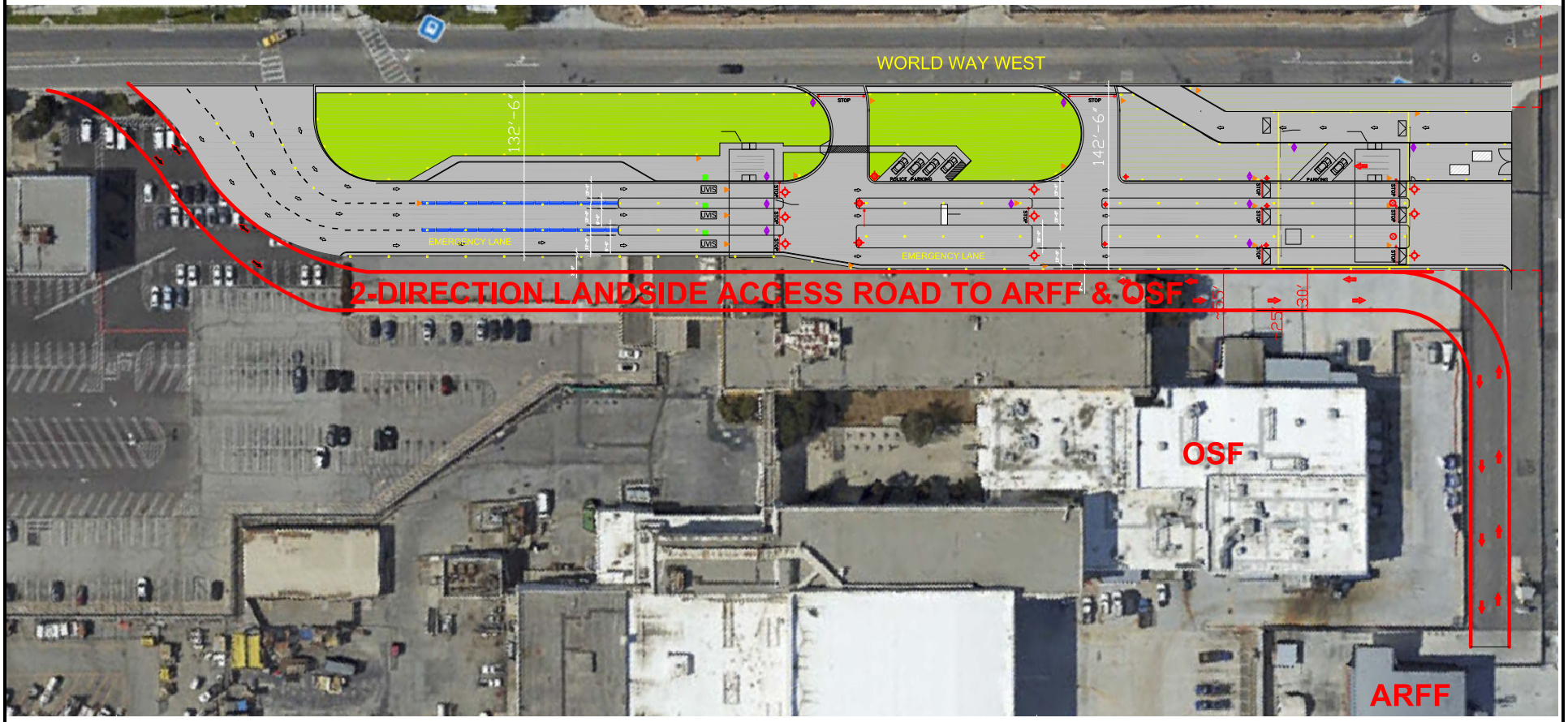
- Station 3 – Sally Port: the primary two functions of this station are to provide a secure gateway to the AOA and to allow LAWA Police Division (LAWAPD) officers to inspect vehicles within a controlled environment.

The proposed SAAP would include an independent emergency lane to provide dedicated access for emergency vehicles. The emergency lane would be intended to be used by LAWA and LAFD emergency vehicles. In addition, the proposed SAAP would include employee parking onsite. Currently, LAWAPD personnel are transported to Post 21 by van.

As described below, constructing the proposed new SAAP would require the removal of the former CAL GO Building and associated facilities. Some LAWA and tenant/visitor parking spaces in the parking lot south of World Way West would also be eliminated. Construction of the new SAAP would also eliminate the current landside access routes to the AA OSF and Fire Station 80/ARFF. Access to the AA OSF is currently provided via World Way West to a surface parking lot located to the east of the CAL GO Building. Under the proposed project, the current site of the parking lot would be occupied by the easterly portion of the SAAP. Access to Fire Station 80/ARFF is currently provided via World Way West to an access-controlled road located east of the AA OSF (the access road is located across World Way West and slightly to the east of Coast Guard Road). This access road would no longer be accessible from World Way West with implementation of the proposed project. Access to the AA OSF and Fire Station 80/ARFF would be maintained by providing a new access road along the south side of the new SAAP (see **Figure 6**). As proposed, the entrance to this new access road would be located off of World Way West, adjacent to the proposed SAAP access point.

Demolition of CAL GO Building and Associated Facilities

Construction of the new SAAP would require the demolition and removal of the former CAL GO Building (both the main building and the west entrance addition), the pedestrian bridge between the CAL GO Building and the AA Engineering Building, and pedestrian access point infrastructure. Activities associated with demolition of these facilities are described below.



Source: Ricondo & Associates, April 2017.
Prepared by: CDM Smith, April 2017.

LAX Secured Area Access Post Project	**Proposed Landside Access Road**	Figure **6**

The main CAL GO Building was constructed in 1963 and is a two-story structure with subterranean parking. Its footprint is approximately 310 feet by 164 feet, encompassing roughly 151,000 SF of floor area, including a basement garage. The 1974 west entrance addition to the main CAL GO Building is approximately 4,500 SF and is one-story plus a basement. In total, the building is approximately 155,500 SF. The CAL GO Building is steel-framed with metal stud-framed exterior walls on its west, south, and east sides, and a glass curtain wall on the north exterior side.[12, 13] The CAL GO Building has been largely unoccupied since approximately 1995, with the exception of one office, which was occupied until 2001.[14] After 2001, the building was completely vacated by personnel. A small portion of the building (the west entrance addition), contains security system electronic infrastructure; no staff occupy this area. As described previously, the CAL GO Building contains hazardous building materials, including ACM, LCS, mold, and other hazardous substances. Building systems have exceeded their useful life span, and the lack of proper ongoing maintenance over the last two decades has left the CAL GO Building in a state of substantial disrepair. Furthermore, as the GO CAL Building is an older steel frame design (i.e., prior to the Northridge earthquake of 1994), the structural system has numerous inadequacies that do not meet current building codes.

Facilities to be demolished are the CAL GO Building, including the west entrance addition, and associated facilities. The associated facilities are the pedestrian bridge connecting the CAL GO Building to the AA Engineering Building and the pedestrian access facility at the southwest corner of the CAL GO Building, including the gates and canopy structures. Building and system modifications needed as a result of these demolitions would also be made during the demolition phase.

Prior to the initiation of demolition activities, abatement of hazardous building materials would be conducted to remove ACM, LCS, mold, and other hazardous materials inside the CAL GO Building. Abatement and disposal of hazardous building materials would be done in accordance with local, state, and federal regulations which govern the removal and disposal of hazardous building materials**.**

Demolition of the CAL GO Building would include removal of the building foundation and below grade footings, removal of utility infrastructure, and demolition of several retaining walls. Demolition would extend approximately 5 feet below the existing ground surface. Demolition of the CAL GO Building foundations and footings would require backfill of the void left by the demolition. In addition, the partial subterranean parking area would also be filled.

As noted above, adjoining the southeast portion of the CAL GO Building is the smaller AA OSF structure (see Figure 3). The CAL GO Building and adjoining AA OSF structure are separated by a seismic joint all the way through the underground garage and basement, making the two structures seismically and structurally independent. The partition separating the spaces between the two structures is an interior partition wall, and removal of the CAL GO Building would expose this interior wall to the elements, thus requiring that this wall be modified to be a finished exterior wall. A new exterior wall skin would be constructed to make the AA OSF structure secure, weather tight, and whole. The existing

[12] Incorporated by reference: City of Los Angeles, Los Angeles World Airports, Draft Environmental Impact Report for Los Angeles International Airport (LAX) Landside Access Modernization Program, (SCH 2015021014), Appendix J, LAX Preservation Plan, September 2016.

[13] Incorporated by reference: Ninyo & Moore, Hazardous Building Material Survey, Continental Airlines General Office Building, Chelsea Kitchen Basement, and Training Buildings, Los Angeles International Airport, 7270, 7300, and 7320 World Way West, Los Angeles, California, May 18, 2016.

[14] Tomcheck, Pat, Los Angeles World Airports, Electronic Mail Message to Robin Ijams, CDM Smith, Subject: Continental General Office Building – last occupancy, January 26, 2017.

basement floor of the AA OSF structure is approximately 5 feet below the projected finish grade. When the CAL GO Building is demolished, this condition would require construction of a new retaining wall along the entire length of the existing OSF structure north wall. The new retaining wall would tie into existing retaining walls that would remain along the east and west sides of the AA OSF basement. The new wall would be constructed with a waterproofing system to maintain a dry environment in the existing basement. Demolition of the CAL GO Building would be planned and undertaken in a manner to ensure occupancy and operation of the AA OSF during and after demolition.

At the west end of the CAL GO Building is a pedestrian bridge that spans across the AA OSF exterior courtyard to the AA Engineering Building to the south (see Figure 3). The bridge structure is steel-framed with a bare metal roof deck. This bridge provided access between the CAL GO Building and the AA Engineering Building before it was sealed off on both ends. As part of the proposed project, the pedestrian bridge would be demolished. Following demolition of the pedestrian bridge, a new exterior infill wall would be constructed at the existing AA Engineering Building exterior wall, and the existing AA OSF courtyard finish pavement surfaces would be repaired where bridge foundations are removed. Demolition of the pedestrian bridge would be planned and undertaken in a manner to ensure occupancy and operation of the AA Engineering Building during and after demolition.

At the southwest corner of the west entrance addition of the CAL GO Building is a pedestrian access point used by AA and United Airlines employees to access the AA Engineering Building and United Airlines Maintenance Hangar (see Figure 3). The pedestrian access gate includes two ACAMS-controlled turnstiles gates, one turnstile exit gate, and one pedestrian ADA-compliant swing gate (all currently under lease to, and operated by, United Airlines). The turnstiles and pedestrian gate are shaded by two freestanding canopy roof structures. All infrastructure related to the pedestrian access point, including the canopy structures, would be demolished.

The CAL GO Building west entrance addition currently houses security system electronic infrastructure, which supports operation of the existing pedestrian point mentioned above as well as a vehicle access point. While the vehicle access point would remain, all infrastructure related to the pedestrian access point would be demolished (as described above). The electronic infrastructure which supports the vehicle access gate would be disconnected and relocated to an area within the AA Engineering Building. This would not require any additional building area to be added to the AA Engineering Building.

Demolition would also include removal of existing concrete walkways, asphalt pavement, curbs and gutters, retaining walls, trees, and planter areas surrounding the CAL GO Building. Removal of landscaping would result in the removal of approximately 45 non-native ornamental trees located around the perimeter of the CAL GO Building and within the surface parking area to the west.

Demolition is projected to commence in late 2017. All demolition activities would occur on the landside (i.e., publicly-accessible areas outside the AOA).

Construction

The primary consideration in planning for proposed project construction activities is to maintain safe and uninterrupted operation of the airport, including airfield operations and aircraft maintenance activities. As noted above, demolition and construction of the proposed project would take approximately 13 months. Construction and demolition may not be continuous; the 13 months of construction activity is estimated to occur in the timeframe between the fourth quarter of 2017 and the

second quarter of 2020.[15] Work would occur between 6:00 am and 3:30 pm; work hours would be written into the construction specifications. At peak construction, approximately 40 construction personnel would be onsite.

Development of the proposed SAAP would occur on a portion of LAX that is currently paved/developed, with small areas of ornamental landscaping. The total area of ground surface to be disturbed would be approximately 23,000 square yards, extending down to a maximum depth of approximately 5 to 8 feet. Approximately 33,000 cubic yards of soil/pavement would be removed from the project site; the peak daily amount of soil/pavement to be removed would be approximately 370 cubic yards. Non-hazardous construction and demolition debris generated at the site would be recycled or salvaged to achieve a 65 percent diversion in construction waste. Transport of hazardous building materials associated with demolition of the CAL GO Building and any contaminated soils (if encountered and requiring disposal) would be performed by licensed hazardous waste haulers. Disposal would comply with applicable local, state, and federal regulations governing disposal of hazardous materials, including transport by a licensed waste hauler and disposal at a properly certified facility.

If it is feasible and practical, existing pavement, such as asphalt and concrete, would be crushed at a location on airport property and reused as base material or as aggregate in the production of concrete to be poured/placed onsite. However, since off-site export would generate greater impacts than would onsite reuse (see Section III.b), for purposes of calculating impacts, it is conservatively assumed that no materials would be reused and that, instead, all materials would be exported off the airport. For purposes of determining impacts, it was assumed that the proposed project would require approximately 33,000 cubic yards of imported fill; actual fill would likely be lower.

The construction staging area and haul route for the proposed project are shown on **Figure 7**. As shown, the proposed construction staging area is located immediately west of the project site, within the parking lot around the former CAL Training Building, which is now vacant. During the demolition activities as well as construction of the new SAAP, all construction activities would occur on the landside and no on-airport entry would be required. The haul route on public roads to and from the project site would extend from the driveway at World Way West to south on Pershing Drive, to east on Imperial Highway, and then connecting to I-105. No lane or road closures of public roadways would be required for construction.

[15] For the purposes of evaluating cumulative impacts, the identification of projects whose construction would overlap with that of the proposed project may be conservative. Depending upon actual project construction dates of the SAAP, some projects that are shown as overlapping may not in fact overlap with construction of the proposed SAAP.

LAX Secured Area Access Post Project

Proposed Construction Staging Area and Haul Route

Figure
7

Demolition/construction activities for the proposed project would not affect airport/aircraft operations. The project site is not located adjacent to any areas used by aircraft or ground support equipment. Moreover, as noted above, all construction activities would be planned and undertaken in a manner that would ensure the occupancy and operation of the AA OSF and AA Engineering Building during and after demolition of the CAL GO Building. Construction staging would be coordinated by LAWA's Construction and Logistics Management (CALM) Team. The CALM Team helps monitor and coordinate the construction logistics of development projects at LAX in the interest of avoiding conflicts between ongoing airport operations and construction activities. In accordance with standard LAWA practice,[16] construction would be coordinated with the LAWA CALM Team to ensure that occupancy and operation of adjacent and surrounding facilities, including the AA Engineering Building, AA OSF, United Airlines Maintenance Hangar, Fire Station 80/ARFF, LAX Fuel Farm, and LAWA administrative offices, would be maintained throughout demolition and construction activities.

As required by the Los Angeles Department of Building and Safety, LAWA would submit a Haul Route Form and Haul Route Map, as shown on Figure 7, identifying routes to be used by trucks to export soil or demolition debris offsite. In addition, pursuant to standard Los Angeles, Department of Transportation (LADOT) practices,[17] a Work Traffic Control Plan, showing the location of the construction area and identifying construction traffic, as evaluated in this Initial Study, would be submitted to LADOT.

LAWA Design and Construction Practices

The proposed new SAAP would be designed and constructed in accordance with the Los Angeles Green Building Code (LAGBC),[18] which is based on the California Green Building Code (CALGreen),[19] and would achieve, at a minimum, LAGBC Tier 1 conformance through environmentally-sensitive features including, but not limited to, the types described below.

Non-hazardous construction and demolition debris generated at the site would be recycled or salvaged to achieve a 65 percent diversion in construction waste, as required to achieve LAGBC Tier 1 conformance.[20] The SAAP would include efficient lighting fixtures and controls with occupancy sensors to reduce energy consumption during off-peak hours, and the SAAP's heating, ventilation, and air conditioning controls would be designed to reset temperatures to maximum efficiency without sacrificing occupant comfort. Where possible, the facility would incorporate coated glass that minimizes heat gain as well as building materials and furnishings made of recycled content. During construction, low-emitting paints, adhesives, and sealants would be used to the extent feasible. To conserve potable water, the restrooms in the new SAAP would be designed with low- or ultra-low-flow systems, and recycled water would be used for construction-related dust control and construction equipment washing

[16] City of Los Angeles, Los Angeles World Airports, Design and Construction Handbook: Coordination and Logistics Management (CALM) – CALM Review Procedures, June 2016. Available: http://www.lawa.org/uploadedFiles/LAXDev/DCH/Construction/CALM%20Review%20Procedures%20TIAP%20Process%20July%202016.pdf.

[17] City of Los Angeles, Department of Transportation, LADOT Homepage: Transportation Impact Studies, B-Permits, & CCTC. Available: http://ladot.lacity.org/contact-us/transportation-impact-studies-b-permits-cttc.

[18] City of Los Angeles, Los Angeles Municipal Code, Chapter IX, Article 9, Green Building Code, as amended.

[19] 24 California Code of Regulations, Part 11, California Building Standards Commission, 2016 California Green Building Standards Code (CALGreen).

[20] City of Los Angeles, Los Angeles Municipal Code, Chapter IX, Article 9, Green Building Code, as amended, Appendix A5, Table A5.601 Non Residential Buildings: Green Building Standards Code Tier 1 and Tier 2 Reference Table.

when feasible. The relationship of these features and practices to potential project impacts is identified in Attachment A of the Initial Study.

In addition to the measures identified above, LAWA has implemented a wide range of actions designed to reduce temporary, construction-related air pollutant and greenhouse gas emissions from its ongoing construction program and has established aggressive construction emissions reduction measures, particularly with regard to requiring construction equipment and heavy duty trucks to be newer models that have low-emission engines or be equipped with emissions control devices.[21] To achieve this commitment, LAWA has developed standard control measures which would be applied to the project, as discussed in greater detail in Attachment A, Section III below. For example, on-road haul trucks with a gross vehicle weight rating of at least 14,001 pounds would comply with U.S. Environmental Protection Agency (USEPA) 2010 on-road emissions standards for particulate matter up to 10 micrometers in size (PM10) and nitrogen oxides (NOx). Contractors would be required to use compatible on-road haul trucks or the next cleanest burning vehicle available. Off-road diesel-powered construction equipment greater than 50 horsepower would meet new USEPA Tier 4 (final) off-road emissions standards or the next cleanest equipment available. Other measures would be implemented to further reduce fugitive dust generation and minimize use of portable generators for electrical power in favor of grid power where available. An independent Third-Party Monitor would track, verify, and report on the use of clean construction equipment and would quantify emissions benefits.

The impacts of the proposed project on the majority of the resource areas addressed by these measures—namely, air quality, greenhouse gas emissions, solid waste, and water supply—are discussed below in the Initial Study. The ability of these measures to reduce potential project impacts is also identified in the Initial Study. The energy implications of the proposed project will be addressed in the EIR, with emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy pursuant to State CEQA Guidelines Appendix F.

4.0 NECESSARY APPROVALS

The City of Los Angeles has principal responsibility for approving and carrying out the proposed project. Agencies and City entities which may be required to take actions associated with the proposed project include, but may not be limited to, the following:

Federal

- U.S. Department of Transportation Federal Aviation Administration (FAA)[22]

Regional

- South Coast Air Quality Management District

[21] City of Los Angeles, Los Angeles World Airports, Los Angeles World Airports Sustainability Report 2015. Available: http://www.laxsustainability.org/documents/Sustainability_Report_2015.pdf, accessed August 25, 2016.

[22] While FAA is not a state agency regarding CEQA review, the proposed project would require approval of Form 7460 (Notice of Proposed Construction or Alteration) in consideration of Part 77 requirements.

Local

- LAWA Board of Airport Commissioners
- City of Los Angeles Department of Building and Safety
- City of Los Angeles Department of Transportation
- City of Los Angeles Department of Cultural Affairs

Other Federal, State, or local approvals, permits, or actions may be necessary.

5.0 DOCUMENTS INCORPORATED BY REFERENCE

This Notice of Preparation/Initial Study (NOP/IS) uses information from various documents (reports, technical studies, etc.) that were not prepared specifically for the proposed project but that provide relevant information in describing environmental conditions and analyzing the potential environmental effects of the proposed project. Pursuant to Section 15150 of the State CEQA Guidelines, all or portions of another document that is a matter of public record or is generally available to the public may be incorporated by reference. When all or part of another document is incorporated by reference, the incorporated portion is treated as if it were set forth in full. (State CEQA Guidelines Section 15150(a).)

Information from other documents that have been incorporated by reference is identified in the project description and in the relevant environmental impact analysis sections of this NOP/IS. These documents are also listed in the References section at the end of this NOP/IS. As required by Section 15150(b) of the State CEQA Guidelines, documents incorporated by reference are available for public inspection at the address listed below. For purposes of clarification, documents identified as incorporated by reference are separate from the technical studies prepared specifically for the proposed project (as distinguished in the References section of this NOP/IS). In all instances, as required by Section 15150(c), the material being incorporated by reference is summarized or briefly described in the relevant analyses.

Documents relied upon or cited in the NOP/IS but not incorporated by reference are also listed in the References section of this NOP/IS and are available for public inspection at the following address:

Los Angeles World Airports
One World Way, Room 218
Los Angeles, California 90045

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 DISTRICT**	**DATE**
Los Angeles World Airports (LAWA)	Council District 11	April 20, 2017

RESPONSIBLE AGENCIES
South Coast Air Quality Management District

PROJECT TITLE/NO.	**CASE NO.**
Los Angeles International Airport (LAX) Secured Area Access Post Project	

PREVIOUS ACTIONS CASE NO.	☐ **DOES have significant changes from previous actions.** ☐ **DOES NOT have significant changes from previous actions.**

PROJECT DESCRIPTION: The proposed project is the construction of a new Secured Area Access Post (SAAP) to provide a fully functional, secured access point onto the Airport Operations Area (AOA) on the west side of LAX. The proposed SAAP would be the sole full-access SAAP on World Way West and would replace SAAP 5, which was displaced by the Midfield Satellite Concourse North Project, and SAAP 21, which will be taken out of service by Phase 2 of the West Aircraft Maintenance Area Project in May 2017. The new SAAP would accommodate all types of vehicles that require access to the AOA (construction, aircraft service vehicles, vendors, LAWA, etc.). The proposed SAAP facility would have a land footprint of approximately 1,200 feet by 150 feet, consisting primarily of paved areas with various pieces of equipment to control access (gates, traffic lights, signage, vehicle arrest systems, security fencing, etc.), vehicle inspection equipment (license plate readers, under-vehicle scanners, etc.), and facilities and shelter for inspection staff, including two canopy structures spanning the width of the first and last inspection station, and two guard station buildings, one at each of the first and last inspection stations. Each guard house would be approximately 350 square feet and would include monitoring equipment and a restroom facility. The proposed SAAP would include an independent emergency lane to provide dedicated access for emergency vehicles. The emergency lane would be intended to be used by LAWA and Los Angeles Fire Department (LAFD) emergency vehicles. The elements of the proposed new SAAP would be the prototype for any future SAAPs and/or improvements to existing SAAPs at LAX. In terms of vehicle access, the proposed SAAP would include employee parking onsite. In addition, the proposed project includes construction of a new access road along the south side of the new SAAP, which would replace the current access to Fire Station 80/Aircraft Rescue and Fire Fighting Facility (ARFF) and the American Airlines (AA) Operations Support Facility (OSF), which would be eliminated with project implementation. Construction of the new SAAP would require the demolition and removal of the former Continental Airlines (CAL) General Office (GO) Building, which is vacant, and associated facilities. The proposed project would only affect vehicles accessing the AOA. The project would not increase existing passenger capacity or the number of aircraft operations at LAX.

ENVIRONMENTAL SETTING:
The project site includes paved areas currently used for vehicle parking and the former CAL GO Building, which is vacant. The land use setting around the project site is characterized by airport operations and aircraft maintenance facilities. Existing adjacent uses include: the LAX Fuel Farm and LAWA administrative offices/vehicle parking to the north and northwest, respectively; a remain overnight (RON) aircraft parking area to the east; the AA OSF, AA Engineering Building, United Airlines Maintenance Hangar, and LAFD Fire Station 80/ARFF to the south; and the former CAL Training Building (vacant) to the west.

PROJECT LOCATION
The project site is located within the center portion of the west side of LAX. LAX is situated within the City of Los Angeles, an incorporated city within Los Angeles County. The project site is in the western portion of LAX parallel to and south of World Way West, west of the Central Terminal Area, north of Imperial Highway, and east of Pershing Drive.

PLANNING DISTRICT LAX Plan LAX Specific Plan	**STATUS:** ☐ **PRELIMINARY** ☐ **PROPOSED** ☒ **ADOPTED**
EXISTING ZONING LAX–A Zone: Airport Airside Sub-Area	☒ **DOES CONFORM TO PLAN**
PLANNED LAND USE & ZONE Airport-related airside uses; no change in zone is proposed	☐ **DOES NOT CONFORM TO PLAN**
SURROUNDING LAND USES North - Airport Airside (access road, administrative offices, vehicle parking, fuel farm) East - Airport Airside (aircraft remain overnight parking apron) South - Airport Airside (airline operations offices, aircraft maintenance hangars, fire station/ARFF) West – Airport Airside (vacant former airline operations building)	☐ **NO DISTRICT PLAN**

☐ **DETERMINATION (To be completed by Lead Agency)**

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions on the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Vinita Washroo — CITY PLANNER

SIGNATURE — **TITLE**

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 than 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 mitigation measures has reduced an effect from "Potentially Significant Impact" to a "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 "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may 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:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. 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.
    c. 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 source 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 whatever format is selected.

9) The explanation of each issue should identify:
    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

INITIAL STUDY CHECKLIST (To be completed by the Lead City Agency)

☞ **BACKGROUND**

PROPONENT NAME	**PHONE NUMBER***
LAWA – Vinita Waskow	(800) 919-3766
PROPONENT ADDRESS	
One World Way, Room 218, Los Angeles, California 90045	
AGENCY REQUIRING CHECKLIST	**DATE SUBMITTED**
LAWA	April 20, 2017
PROPOSAL NAME (If Applicable)*	
LAX Secured Area Access Post Project	

☞ ☐ **ENVIRONMENTAL IMPACTS** (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?	☐	☐	☒	☐
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 state or city-designated scenic highway?	☐	☐	☒	☐
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
II. AGRICULTURE AND FORESTRY RESOURCES. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program 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
III. AIR QUALITY. Would the project:				
a. Conflict with or obstruct implementation of the applicable South Coast Air Quality Management District plans?	☐	☐	☒	☐
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 (PM10, PM2.5, and O_3 precursors [NOx and VOC]) under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
IV. BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
V. CULTURAL RESOURCES: Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines §15064.5?	☒	☐	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines §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 dedicated cemeteries?	☒	☐	☐	☐
VI. GEOLOGY AND SOILS. Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the project area?	☐	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h. Expose people or structures to 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?	☐	☐	☒	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?	☐	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 would result in flooding on- or off-site?	☐	☐	☒	☐
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
X. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
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, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
XI. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒
XII. NOISE. Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
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?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☐	☒
d. Parks?	☐	☐	☐	☒
e. Other public facilities?	☐	☐	☐	☒
XV. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
XVI. TRANSPORTATION/TRAFFIC. Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	☐	☐	☐	☒
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e. Result in inadequate emergency access?	☐	☐	☒	☐
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
XVII. TRIBAL CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: • Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k), or • A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☒	☐	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c. Require or result in the construction of new 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 inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐
XIX. 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, substantially 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?	☒	☐	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	☒	☐	☐	☐
c. Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

☞☐ **DISCUSSION OF THE ENVIRONMENTAL EVALUATION (Attach additional sheets if necessary)**

(See Attachment A)

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ATTACHMENT A
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 on the center portion of the west side of LAX surrounded by airport uses and is not a prominent feature in any scenic vistas. Broad scenic vistas of the Santa Monica Mountains in the distance beyond LAX are available from some north-facing residences at higher elevations in the El Segundo residential neighborhood located approximately 0.75 mile to the south. The proposed new SAAP would not contribute to, or detract from, scenic vistas from these residences due to the location of the proposed facility beyond the intervening airside uses (i.e., airline support facilities, aircraft maintenance hangars, and fire station/ARFF), as well as the higher vantage points from the residences (the proposed SAAP would be well below their line-of-sight) and the presence of trees along the portion of Imperial Avenue that lies to the south of the project site. Moreover, the proposed project would not alter existing long-range views of the Santa Monica Mountains. As such, the implementation of the proposed project would not have a substantial adverse effect on views of the Santa Monica Mountains (i.e., a scenic vista). Therefore, the proposed project would not have a substantial adverse effect on a scenic vista. Potential impacts related to scenic vistas would be less than significant with the implementation of the proposed project and no further evaluation in the EIR 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 state or city-designated scenic highway?

Less Than Significant Impact. The project site includes paved areas used for vehicle parking and the former CAL GO Building, which is vacant. The site is visible from the on-airport roadway on the west side of LAX, World Way West. 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 site (State Highway 2, from approximately 3 miles north of Interstate 201 in La Cañada to the San Bernardino County Line).[23] The nearest eligible state scenic highway (which is not officially designated by the state, but is a City-designated scenic highway) is State Highway 1, which has a starting point at Lincoln and Venice Boulevards, approximately 4 miles from the project site, and proceeds northwesterly to Point Mugu.[24] Vista del Mar, the nearest City-designated scenic highway, is located approximately 1.2 miles west of the project site;[25] the project site is not visible from Vista del Mar. There are no direct views to or from any scenic highways.

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[23] California Department of Transportation, California Scenic Highway Mapping System website, updated September 7, 2011. Available: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed February 27, 2016.

[24] California Department of Transportation, California Scenic Highway Mapping System website, updated September 7, 2011. Available: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed February 27, 2016.

[25] City of Los Angeles, Department of City Planning, Mobility Plan 2035: An Element of the General Plan, Maps

The Los Angeles/El Segundo Dunes are located approximately 0.9 mile west of the project site, opposite Pershing Drive. The project site is not visible from the dunes and the proposed project would not obstruct any views of the dunes. The proposed project is not located within the viewshed of any other scenic resources or other locally recognized desirable aesthetic natural feature. In addition, the project site does not contain any trees, rock outcroppings, or other locally recognized desirable aesthetic natural features within a City-designated scenic highway. The proposed project would not substantially damage scenic resources, including scenic highways.

There are no scenic resources located on the project site. The proposed project would result in the demolition of the CAL GO Building, which has been identified as potentially eligible for listing in the California Register of Historical Resources and/or as a Los Angeles Historic-Cultural Monument. The CAL GO Building has not been identified as a scenic resource. As a result, demolition of the building would not affect any existing scenic resources on the site, including trees, landscaping, or historic buildings. The potential for the proposed project to result in a substantial adverse change in the significance of a historical resource is detailed below in Section V.a.

Potential impacts related to scenic resources would be less than significant with the implementation of the proposed project and no further evaluation in the EIR 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 developed area within a busy international airport. The proposed project site includes paved areas used for vehicle parking and the former CAL GO Building, which is vacant. The land use setting around the project site is generally characterized by airport operations and aircraft maintenance facilities, which are utilitarian and industrial in character. Given the distance of the project site from the airport boundaries, as well as intervening topography and structures such as buildings and fences, the project site is not prominent from locations beyond the airport boundaries. Further, views of the airport facilities on the center portion of the west side of the airport are not scenic or of high quality visual character. The proposed new SAAP facility would include two approximately 350 square foot guard station buildings. The guard station buildings would be one story, and approximately 16 feet in height. Two canopies with approximately 25 feet in height clearance would also be installed at the pre-screening station and the Sally Port. The buildings and canopies would be functional in design, which is consistent with the existing visual character and quality of the site and surrounding land uses. The proposed facility would be visually compatible with existing airport facilities on the center portion of the west side of LAX. Therefore, the potential impacts on the existing visual character or quality of the site and its surroundings would be less than significant with the implementation of the proposed project and no further evaluation in the EIR is required.

D1 and D2, December 17, 2015, as adopted January 20, 2016. Available: http://planning.lacity.org/documents/policy/mobilityplnmemo.pdf.

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

Less Than Significant Impact. The project site is in an urban area with many existing sources of ambient lighting, including street lights and lighting of the airfield and other airport facilities. New lighting associated with the proposed project would include security lighting on the new guard station buildings, canopy lighting, roadway lighting, and perimeter fence lighting along the sally port. Perimeter fence lighting would include either pole-mounted or fence-mounted LED fixtures matching existing foot-candle outputs. External lights would be shielded and focused to avoid glare and prevent unnecessary light spillover. The project site is in an area with existing light sources that include roadway, building, perimeter fence, and airfield lighting. The new light sources would be consistent with existing light sources and lighting levels and would not substantially change the ambient lighting levels in the area. Therefore, implementation of the proposed project would not have the potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Potential impacts related to light and glare would be less than significant with the implementation of the proposed project and no further evaluation in the EIR is required.

II. AGRICULTURE AND FORESTRY RESOURCES. *Would the project:*

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program 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 at the project site or surrounding areas, including prime or unique farmlands or farmlands of statewide local importance. Further, there are no Williamson Act contracts in effect for the project site or surrounding areas.[26] The proposed project would represent a continuation of the current airport-related uses and would not convert farmland to non-agricultural use nor would it result in any conflicts with existing zoning for agricultural use or a Williamson Act contract.

[26] City of Los Angeles, Department of City Planning, Conservation Element of the City of Los Angeles General Plan, Exhibit B2, SEAs and Other Resources, January 2001.

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 would be consistent with the current airport-related uses and would not convert forest land or timberland to non-forest. Therefore, no impacts to agricultural or forest land or timberland resources would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

III. AIR QUALITY. *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 (SCAG), 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 2012 AQMP[27] describes the SCAQMD's plan to attain the federal standard for fine particulate matter less than or equal to 2.5 microns (µm) in diameter (PM2.5) by 2014 and to continue improving ozone (O_3) levels. A February 2015 Supplement to the 24-hour PM2.5 SIP[28] for the basin was adopted to demonstrate attainment of the standard by 2015. However, the basin remains in nonattainment for PM2.5.[29] AQMP emissions control measures include reducing PM2.5 and nitrogen oxides (NOx) emissions from on- and off-road vehicle engines. In 2007, CARB adopted a regulation to reduce diesel particulate matter and NOx emissions from in-use (existing) off-road heavy-duty diesel vehicles. The Final 2012 AQMP identifies control measures for O_3 presented in the Final 2007 AQMP,[30] which include requiring the use of cleaner (as compared to "baseline") on-road and off-road equipment. All construction equipment used for the proposed project, including both on-road trucks and off-road construction equipment, would operate in compliance with the state law and would be consistent with the Final 2012 AQMP. For example, as noted in Section III.b, on-road trucks of a certain size would comply with USEPA 2010 on-road emissions standards for PM10 and NOx, and off-road diesel-powered construction

[27] South Coast Air Quality Management District, Final 2012 Air Quality Management Plan, February 2013.

[28] South Coast Air Quality Management District, Final Supplement to the 24-Hour PM2.5 State Implementation Plan for the South Coast Air Basin, February 2015.

[29] Despite the current non-attainment status, air quality within the Basin has generally improved since the inception of air pollutant monitoring in 1976. This improvement is mainly due to lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by the SCAQMD. See the 2012 AQMP. As discussed in the AQMP, despite growth, air quality has improved significantly over the years, primarily due to the impacts of the region's air quality control program. For example, PM10 levels have declined almost 50 percent since 1990, and PM2.5 levels have also declined 50 percent since measurements began in 1999. As shown in Chapters 2 and 5 of the AQMP, the only air monitoring station that is currently exceeding or projected to exceed the 24-hour PM2.5 standard from 2011 forward is the Mira Loma station in Western Riverside County. Similar improvements are observed with ozone, although the rate of ozone decline has slowed in recent years. Similar trends are projected under future cumulative projections, as shown in greater detail on SCAQMD's website. See: South Coast Air Quality Management District, Historic Ozone Air Quality Trends: Ozone, 1976-2014. Available: http://www.aqmd.gov/home/library/air-quality-data-studies/historic-ozone-air-quality-trends, accessed July 16, 2016.

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

equipment of a certain size would meet USEPA Tier 4 (final) off-road emission standards, subject to provisions spelled out in Section III.b below. Furthermore, the new facility would meet LAGBC Tier 1 requirements, at a minimum. As noted in Section 3.0, *Project Description*, the proposed project would include efficient lighting fixtures and controls with occupancy sensors to reduce energy consumption during off-peak hours, and the SAAP's heating, ventilation, and air conditioning controls would be designed to reset temperatures to maximum efficiency without sacrificing occupant comfort. Where possible, the SAAP would incorporate coated glass that minimizes heat gain as well as building materials and furnishings made of recycled content. During construction, low-emitting paints, adhesives, and sealants would be used to the extent feasible. The proposed project would meet the goals of the AQMP related to energy efficiency and conservation and, therefore, would not conflict with, or obstruct implementation of, the AQMP. Therefore, impacts to the applicable SCAQMD plan (i.e., the 2012 AQMP) would be less than significant and no further evaluation in the EIR is required.

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

Less Than Significant Impact.

Existing Regulations

Air quality standards are contained in the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA).

Federal Clean Air Act

The USEPA is responsible for implementation of the CAA. The CAA was first enacted in 1970 and has been amended numerous times in subsequent years (1977, 1990, and 1997). Under the authority granted by the CAA, USEPA has established National Ambient Air Quality Standards (NAAQS) for the following criteria pollutants: O_3, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), PM10, and PM2.5. As discussed previously, O_3 is a secondary pollutant, meaning that it is formed from reactions of "precursor" compounds under certain conditions. The primary precursor compounds that can lead to the formation of O_3 are volatile organic compounds (VOCs) and NOx.

The CAA also specifies future dates for achieving compliance with the NAAQS and mandates that states submit and implement a State Implementation Plan (SIP) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or meet interim milestones.

The project site is located in the South Coast Air Basin. The South Coast Air Basin is designated as a federal nonattainment area for:

- O_3, which is evaluated using surrogates VOC and NOx
- Respirable particulate matter less than or equal to 2.5 µm in diameter (PM2.5)
- Lead

Nonattainment designations under the CAA for O_3 are classified into levels of severity based on the level of concentration above the standard, which is also used to set the required attainment date. The South Coast Basin is classified as an extreme nonattainment area for O_3, and a serious nonattainment area for PM2.5.

The South Coast Air Basin is designated as a federal attainment area for:

- SO_2

The South Coast Air Basin is designated as a federal attainment/maintenance area for:

- CO
- NO_2
- PM10

Attainment/maintenance means that the pollutant is currently in attainment and that measures are included in the SIP to ensure that the NAAQS for that pollutant are not exceeded again (i.e., maintained). The attainment status with regards to the NAAQS is presented in **Table 1** for each criteria pollutant.

Table 1
South Coast Air Basin Attainment Status

Pollutant	Federal Standards (NAAQS)[1]	California Standards (CAAQS)[2]
Ozone (O_3)	Nonattainment – Extreme	Nonattainment
Carbon Monoxide (CO)	Attainment – Maintenance	Attainment
Nitrogen Dioxide (NO_2)	Attainment – Maintenance	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Respirable Particulate Matter (PM10)	Attainment - Maintenance	Nonattainment
Fine Particulate Matter (PM2.5)	Nonattainment[3]	Nonattainment
Lead (Pb)	Nonattainment	Attainment

Notes:
1 Status as of June 17, 2016.
2 Effective December 2015.
3 Classified as moderate nonattainment for 2012 NAAQS and serious nonattainment for 2006 NAAQS.

Sources: U.S. Environmental Protection Agency, Nonattainment Areas for Criteria Pollutants (Green Book). Available: http://www3.epa.gov/airquality/greenbk/index.html [revised to https://www.epa.gov/green-book], accessed May 24, 2016; California Air Resources Board, Area Designations Maps/State and National, effective December 2015. Available: http://www.arb.ca.gov/desig/adm/adm.htm, accessed July 2016.

California Clean Air Act

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 project site is located in the Los Angeles County sub-area of the SCAB. Los Angeles County is designated as a state nonattainment area for:

- O_3, which is evaluated using surrogates VOC and NOx
- PM2.5
- PM10[31]

Los Angeles County is designated as a state attainment or unclassified area for:

- CO
- NO_2
- SO_2
- Sulfates
- Hydrogen sulfide
- Visibility reducing particles
- Lead[32]

Significance Thresholds

The SCAQMD publishes thresholds of significance for criteria pollutants.[33] If the proposed project were to result in emissions that would exceed the significance criteria, then a significant impact would occur under existing and cumulative conditions.[34] **Table 2** summarizes the mass daily thresholds for construction and operation.

Table 2
SCAQMD Mass Daily Pollutant Emission CEQA Thresholds of Significance

Pollutant	Construction	Operation
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day

Source: SCAQMD 2015.

[31] California Air Resources Board, Area Designations Maps/State and National Homepage. Available: http://www.arb.ca.gov/desig/adm/adm.htm, accessed May 17, 2016.
[32] California Air Resources Board, Area Designations Maps/State and National Homepage. Available: http://www.arb.ca.gov/desig/adm/adm.htm, accessed July 2016.
[33] South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds, March 2015.
[34] South Coast Air Quality Management District, White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, Appendix D, August 2003.

Methodology

Construction

Peak daily emissions from construction equipment, haul trucks, and construction worker commuting trips; fugitive VOCs from architectural coatings; and fugitive dust from soil handling, grading, and paved road dust were calculated. The emissions estimates assume compliance with existing SCAQMD regulations. Specifically, the analysis assumes compliance with SCAQMD Rule 403 for controlling fugitive dust, and use of ultra-low sulfur diesel fuel.[35] Per the requirements of Rule 403, watering twice daily was assumed, which would reduce emissions of PM10 and PM2.5 by 55 percent.

The California Emissions Estimator Model (CalEEMod), Version 2013.2.2, is a statewide land use emissions computer model that estimates construction and operational emissions from a variety of land use projects.[36] However, the model does not have default data on the facilities associated with the SAAP project. Therefore, for modeling purposes, it was assumed that building-related construction (i.e., construction of the guard houses, and exterior walls of the AA Engineering Building and AA OSF structure) would be similar for most construction activities to General Office Building construction, and that construction of the paved surfaces would be similar to Other Asphalt Surfaces. (The guard booths at the new SAAP would be fabricated off-site; therefore, emissions associated with guard booth construction would be lower than estimated in this analysis.) CalEEMod default values for these construction types were used in the analysis. The analysis does not estimate lead emissions because no major sources of lead would occur at the site. Refer to Appendix A-1 of this Initial Study for the detailed model results.

If it is feasible and practical, existing pavement, such as asphalt and concrete, would be crushed at a location on airport property and reused as base material or as aggregate in the production of concrete to be poured/placed onsite. However, since off-site export would generate greater impacts than would onsite reuse, for purposes of calculating impacts to air quality, it is conservatively assumed that no materials would be reused and that, instead, all materials would be exported off the airport. Refer to Appendix A-2 for detailed calculations related to aggregate crushing and hauling emissions.

Operations

As explained in Section 1.0, *Introduction,* the proposed project would not result in an increase in the number or type of vehicles that would use the new SAAP. Moreover, although the AOA access point would be relocated half a mile to the east, which would require vehicles to travel slightly farther on public roads to access the SAAP, because vehicles would travel to all parts of the AOA once they have passed through the SAAP, the total vehicle miles traveled with implementation of the proposed project is not expected to change from current conditions. Also as explained in Section 1.0, *Introduction,* the proposed project would not affect the number of passengers or aircraft operations at LAX.

Operational criteria pollutant emissions would occur indirectly from energy used at the proposed SAAP. Features at the facility that would consume energy would include lighting, HVAC

[35] California Air Resources Board, The California Diesel Fuel Regulations, Title 13, California Code of Regulations, Sections 2281-2285, Title 17, California Code of Regulations, Section 93114, with amendments operative August 14, 2004. Available: https://www.arb.ca.gov/fuels/diesel/081404dslregs.pdf.

[36] California Air Pollution Control Officers Association, California Emissions Estimator Model (CalEEMod) Homepage. Available: http://www.caleemod.com/, accessed July 2016.

equipment, and security and vehicle screening equipment. Project-related operational emissions were calculated using a CalEEMod default analysis. Resulting future operational criteria pollutant emissions were compared to existing operational emissions associated with SAAP 32 to determine project-related impacts.

All operating power to the proposed SAAP would be provided by the grid; generators would not be used for normal operations. Criteria pollutant emissions associated with energy demand from the proposed SAAP were estimated based on CalEEMod default grid emission factors for the Los Angeles Department of Water and Power (LADWP). The two inspection booths at the existing SAAP 21 are powered by generators, which operate 24 hours per day, 7 days a week. Criteria pollutant emissions related to use of these generators were estimated using USEPA AP-42 emission factors. Results are provided below.

Estimated Project Emissions

Construction

Table 3 summarizes maximum daily criteria pollutant emissions that would occur from project-related construction activities based on the methodology and assumptions described above. Detailed calculations are provided in Appendix A-1.

Table 3
Construction Emissions Summary – Criteria Pollutants

	Maximum Daily Emissions (pounds per day)					
	VOC	**NOx**	**CO**	**SO2**	**PM10**	**PM2.5**
Maximum Daily Emissions	5	57	42	<1	7	5
SCAQMD Construction Threshold	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Source: Appendix A-1 of this Initial Study.

As shown in Table 3, assuming compliance with SCAQMD regulations pertaining to fugitive dust control and diesel fuel, construction emissions would not violate an air quality standard or contribute substantially to an existing or projected air quality standard. Therefore, impacts related to air quality standards from project construction would be less than significant and no further evaluation in the EIR is required.

Operations

Peak daily emissions during project operations are presented in **Table 4**. Detailed calculations are provided in Appendix A-3. As shown in Table 4, with implementation of the proposed SAAP, criteria pollutant emissions would not exceed SCAQMD thresholds. Moreover, project-related operational criteria pollutant emissions would be lower than existing emissions from SAAP 21. The proposed SAAP would generate higher energy demand from the addition of state-of-the art vehicle and security equipment. However, as shown in Table 4, even with the higher energy demand, with the conversion from generator to grid power, operational criteria pollutant emissions would decrease compared to existing emissions from SAAP 21. The reduction in criteria pollutant emissions would be a beneficial impact.

Table 4 Energy-Related Operational Emissions Summary – Criteria Pollutants						
	Energy-Related Operational Emissions (pounds per day)					
	VOC	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Existing SAAP 21 Energy-Related Emissions	1.21	3.19	2.77	0.99	0.16	0.16
Proposed Project Energy-Related Emissions	0.01	0.04	0.08	<0.01	0.01	0.01
Net Emissions	**-1.20**	**-3.15**	**-2.69**	**-0.99**	**-0.15**	**-0.15**
SCAQMD Operations Threshold	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Source: Appendix A-3 of this Initial Study.

Standard Control Measures

As shown above, impacts related to air quality standards would be less than significant; therefore, no mitigation measures are required. Nevertheless, LAWA would implement the following standard control measure, which would serve to reduce construction-related emissions associated with the proposed project. The individual measures were selected from a list of standard control measures developed by LAWA for projects at LAX. Only those measures that are applicable to the proposed project are identified below. Measure numbers follow those on the standard list, therefore, the numbers listed in the table below are not consecutive.

- **LAX-AQ-1 - Construction-Related Air Quality Standard Control Measures.**

  This measure describes numerous specific actions to reduce fugitive dust emissions and exhaust emissions from on-road and off-road mobile and stationary sources used in construction. Specific measures are identified in **Table 5.**

Table 5 Construction-Related Air Quality Standard Control Measures		
Measure Number	**Measure**	**Type of Measure**
1a	Post a publicly visible sign(s) with the telephone number and person to contact regarding dust complaints; this person shall respond and take corrective action within 24 hours.	Fugitive Dust
1b	During construction, the contractor shall demonstrate that all ground surfaces are covered or treated sufficiently to minimize fugitive dust emissions.	Fugitive Dust
1c	All areas to be paved should be completed as soon as practical; in addition, building pads should be laid as soon as practical after grading.	Fugitive Dust
1d	Prohibit idling or queuing of diesel-fueled vehicles and equipment in excess of five minutes. This requirement will be included in specifications for any LAX projects requiring on-site construction. Exemptions may be granted for safety-related and operational reasons, as defined by CARB or as approved by LAWA.	On-Road and Off-Road Mobile

Table 5 Construction-Related Air Quality Standard Control Measures		
Measure Number	**Measure**	**Type of Measure**
1e	All diesel-fueled equipment used for construction will be outfitted with the best available emission control devices, where technologically feasible, primarily to reduce emissions of diesel particulate matter (PM), including fine PM (PM2.5), and secondarily, to reduce emissions of NOx. This requirement shall apply to diesel-fueled off-road equipment (such as construction machinery), diesel-fueled on-road vehicles (such as trucks), and stationary diesel-fueled engines (such as electric generators). (It is unlikely that this measure will apply to equipment with Tier 4 engines, as these engines typically already incorporate the best available emission control devices.) The emission control devices utilized in construction equipment shall be verified or certified by California Air Resources Board or US Environmental Protection Agency for use in on-road or off-road vehicles or engines. For multi-year construction projects, a reassessment of equipment availability, equipment fleet mixtures, and best available emissions control devices shall be conducted annually for equipment newly brought to the project site each year.	Mobile and Stationary
1g	To the extent feasible, have construction employees commute during off-peak hours.	On-Road Mobile
1h	Make access available for on-site lunch trucks during construction, as feasible and consistent with requirements pertaining to airport security, to minimize off-site worker vehicle trips.	On-Road Mobile
1i	Utilize on-site rock crushing facility during construction, when feasible, to reuse rock/concrete and minimize off-site truck haul trips.	Stationary Point Source Controls
1j	Every effort shall be made to utilize grid-based electric power at any construction site, where feasible. Grid-based power can be from a direct hookup or a tie in to electricity from power poles. If diesel- or gasoline-fueled generators are necessary, generators using "clean burning diesel" fuel and exhaust emission controls shall be utilized.	Stationary Point Source Controls
1m	The contractor or builder shall designate a person or persons to ensure the implementation of all components of the construction-related measure through direct inspections, record reviews, and investigations of complaints.	Administrative
1n	Locate rock-crushing operations and construction material stockpiles for all LAX-related construction in areas away from LAX-adjacent residents, to the extent possible, to reduce impacts from emissions of fugitive dust.	Stationary Point Source Controls
1o	On-road medium-duty and larger diesel-powered trucks used on LAX construction projects with a gross vehicle weight rating of at least 14,001 pounds shall, at a minimum, comply with USEPA 2010 on-road emissions standards for PM10 and NOx. Contractor requirements to utilize such on-road haul trucks or the next cleanest vehicle available will be subject to the provisions of LAWA Air Quality Control Measure 1q	On-Road Mobile

Table 5 Construction-Related Air Quality Standard Control Measures		
Measure Number	**Measure**	**Type of Measure**
	below.	
1p	All off-road diesel-powered construction equipment greater than 50 horsepower shall meet, at a minimum, USEPA Tier 4 (final) off-road emissions standards. Contractor requirements to utilize Tier 4 (final) equipment or next cleanest equipment available will be subject to the provisions of LAWA Air Quality Control Measure 1q below.	Off-Road Mobile
1q	The on-road haul truck and off-road construction equipment requirements set forth in Air Quality Standard Control Measures 1o and 1p above shall apply unless any of the following circumstances exist and the Contractor provides a written finding consistent with project contract requirements that: • The Contractor does not have the required types of on-road haul trucks or off-road construction equipment within its current available inventory and intends to meet the requirements of the Measures 1o and 1p as to a particular vehicle or piece of equipment by leasing or short-term rental, and the Contractor has attempted in good faith and due diligence to lease the vehicle or equipment that would comply with these measures, but that vehicle or equipment is not available for lease or short-term rental within 120 miles of the project site, and the Contractor has submitted documentation to LAWA showing that the requirements of this exception provision (Measure 1q) apply. • The Contractor has been awarded funding by SCAQMD or another agency that would provide some or all of the cost to retrofit, repower, or purchase a piece of equipment or vehicle, but the funding has not yet been provided due to circumstances beyond the Contractor's control, and the Contractor has attempted in good faith and due diligence to lease or short-term rent the equipment or vehicle that would comply with Measures 1o and 1p, but that equipment or vehicle is not available for lease or short-term rental within 120 miles of the project site, and the Contractor has submitted documentation to LAWA showing that the requirements of this exception provision (Measure 1q) apply. • Contractor has ordered a piece of equipment or vehicle to be used on the construction project in compliance with Measures 1o and 1p at least 60 days before that equipment or vehicle is needed at the project site, but that equipment or vehicle has not yet arrived due to circumstances beyond the Contractor's control, and the Contractor has attempted in good faith and due diligence to lease or short-term rent a piece of equipment or vehicle to meet the requirements of Measures 1o and 1p, but that equipment or vehicle is not available for lease or short-term rental within 120 miles of the project, and the Contractor has submitted documentation to LAWA showing that the	On-Road and Off-Road Mobile

Table 5
Construction-Related Air Quality Standard Control Measures

Measure Number	Measure	Type of Measure
	requirements of this exception provision (Measure 1q) apply. • Construction-related diesel equipment or vehicle will be used on the project site for fewer than 20 calendar days per calendar year. The Contractor shall not consecutively use different equipment or vehicles that perform the same or a substantially similar function in an attempt to use this exception (Measure 1q) to circumvent the intent of Measures 1o and 1p. • Documentation of good faith efforts and due diligence regarding the above exceptions shall include written record(s) of inquiries (i.e., phone log[s]) to at least three (3) leasing/rental companies that provide construction-related on-road trucks of the type specified in Measure 1o above (i.e., medium-duty and larger diesel-powered trucks with a gross vehicle weight rating of at least 14,001 pounds) or diesel-powered off-road construction equipment such as the types to be used by the Contractor, documenting the availability/unavailability of the required types of trucks/equipment. LAWA will, from time-to-time, conduct independent research and verification of the availability of such vehicles and equipment for lease/rent within a 120-mile radius of LAX, which may be used in reviewing the acceptability of the Contractor's good faith efforts and due diligence. In any of the situations described above, the Contractor/ Subcontractor shall provide the next cleanest piece of equipment or vehicle as provided by the step down schedules in Table A for Off-Road Equipment and Table B for On-Road Equipment. Nothing in the above shall require an emissions control device (i.e., VDECS) that does not meet OSHA standards.	

Table A
Off-Road Compliance Step Down Schedule*

Compliance Alternative	Engine Standard	CARB-verified DECS (VDECS)
1	Tier 4 interim	N/A**
2	Tier 3	Level 3
3	Tier 2	Level 3
4	Tier 1	Level 3
5	Tier 2	Level 2
6	Tier 2	Level 1
7	Tier 3	Uncontrolled
8	Tier 2	Uncontrolled
9	Tier 1	Level 2

** Tier 4 (interim or final) or 2007 model year equipment not already supplied with a factory-equipped diesel particulate

Table 5
Construction-Related Air Quality Standard Control Measures

Measure Number	Measure	Type of Measure

filter shall be outfitted with Level 3 VDECS.

Equipment less than Tier 1, Level 2 shall not be permitted.

Table B
On-Road Compliance Step Down Schedule*

Compliance Alternative	Engine Model Year	CARB-verified DECS (VDECS)
1	2007	N/A**
2	2004	Level 3
3	1998	Level 3
4	2004	Uncontrolled
5	1998	Uncontrolled

** 2007 Model Year equipment not already supplied with a factory-equipped diesel particulate filter shall be outfitted with Level 3 VDECS.

Equipment with a model year earlier than Model Year 1998 shall not be permitted.

* How to use Table A and Table B: For example, if Compliance Alternative #1 is required by this policy but Contractor cannot obtain an off-road vehicle that meets the Tier 4 interim standard (Compliance Alternative #1 in Table A) and meets one of the above exceptions, then Contractor shall use a vehicle that meets the next compliance alternative (Compliance Alternative #2) which is a Tier 3 engine standard equipped with a Level 3 VDECS. Should Contractor not be able to supply a vehicle with a Tier 3 engine equipped with a Level 3 VDECS in accordance with Compliance Alternative #2 and has satisfied the requirements of one of the above exceptions as to Contractor's ability to obtain a vehicle meeting Compliance Alternative #2, Contractor shall then supply a vehicle meeting the next compliance alternative (Compliance Alternative #3), and so on. If Contractor is proposing an exemption for on-road equipment, the step down schedule in Table B should be used. Contractor must demonstrate that it has satisfied one of the exceptions listed above before it can use a subsequent Compliance Alternative. The goal of this requirement is to ensure that Contractor has exercised due diligence in supplying the cleanest fleet available.

Nothing in the above shall require an emissions control device (i.e., VDECS) that does not meet OSHA standards.

Source: LAWA, 2016.
Prepared by: CDM Smith, January 2017.

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment (PM10, PM2.5, and O_3 precursors [NOx and VOC]) under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)?

Less Than Significant Impact. Cumulative impacts occur when the impact of one project, when added to other past, present, or probable future projects, could cause a significant impact. In other words, although an individual project's impacts may be less than significant, the combined impacts from the proposed project in conjunction with other projects could cause a significant impact. According to the SCAQMD,[37] projects that do not exceed the significance thresholds are generally not considered to result in a cumulatively considerable contribution to a significant air quality impact, as noted in Section III.b. As shown in Tables 3 and 4, emissions of all criteria pollutants from construction and operational activities, including the nonattainment pollutants (PM10, PM2.5, and O_3 precursors [NO_x and VOC]), would be less than the respective SCAQMD significance thresholds. Therefore, the contribution of proposed project construction and operations to cumulative emissions of these pollutants would not be cumulatively considerable.

The proposed project would not affect operations; therefore, there would be no cumulative impacts related to project operation.

d. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Construction activities would result in emissions of criteria pollutants and toxic air contaminants (TACs). Impacts to sensitive receptors associated with construction-related criteria pollutant emissions were evaluated using SCAQMD's localized significance thresholds (LSTs). TACs are discussed separately. LSTs differ from overall project emissions evaluated above in that they focus on onsite project emissions, whereas overall project emissions consider regional emissions such as trips associated with workers, hauling, and deliveries. For purposes of the LST analysis, the closest sensitive receptors (i.e., hospitals, K-12 schools, residences, and day care centers) are the residential areas within the neighborhood of Westchester to the north, and within El Segundo to the south (see **Figure 8)**.

Criteria Pollutants

The SCAQMD developed thresholds for local air quality impacts from construction activities.[38] LSTs are only applicable to the following criteria pollutants: NO_x, CO, PM10, and PM2.5. LSTs are analogous to National Ambient Air Quality Standards (NAAQS) and CAAQS; pollutant levels below LSTs would not necessarily violate the NAAQS or CAAQS. LSTs consider ambient concentrations of pollutants for each source receptor area and distances to the nearest sensitive receptor.

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

[38] South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, July 2008.

Source: Los Angeles World Airports, July 2016.
Prepared by: CDM Smith, January 2017.

LAX Secured Area Access Post Project	Closest Sensitive Receptors	Figure 8

As indicated in Section 3.0, approximately 4.1 acres of area would be disturbed. As with the analysis of criteria pollutants described in Section III.b above, the LST analysis assumes compliance with existing SCAQMD regulations. Specifically, the analysis assumes compliance with SCAQMD Rule 403 for controlling fugitive dust, and use of ultra-low sulfur diesel fuel. Per the requirements of Rule 403, watering twice daily was assumed, which would reduce emissions of PM10 and PM2.5 by 55 percent. **Table 6** summarizes the onsite localized emissions, which include fugitive dust and off-road construction equipment, and allowable emissions for a 2-acre project located in the Southwest Coastal Los Angeles County Source-Receptor Area (although the project site is approximately 4 acres, it is more conservative to use the thresholds for a 2-acre site than for a 5-acre site; there are no LST thresholds for a 4-acre site). LSTs consider ambient concentrations of pollutants for each source receptor area and distances to the nearest sensitive receptor. The closest receptor for purposes of the LST analysis (i.e., residences within El Segundo to the south) from the project site boundary is located at a distance of approximately 1,200 meters (approximately 3,800 feet); therefore, the LST thresholds for >500 meters were used.

Table 6
Onsite Localized Emissions Summary – Criteria Pollutants

	Maximum Onsite Daily Localized Emissions (pounds per day)					
	VOC	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Maximum Onsite Daily Localized Emissions	5	37	32	<1	7	4
Construction LST (2 acre, and > 500 m to receptor)[39]	N/A	233	7,950	N/A	148	81
Significant Impact?	N/A	No	No	N/A	No	No

Source: Appendix A-1 of this Initial Study.

Projected maximum daily onsite localized emissions would be below the applicable LSTs. Therefore, localized construction peak daily emissions would be less than significant.

Toxic Air Contaminants

The greatest potential for TAC emissions during construction would be diesel particulate matter (DPM) emitted from heavy-duty diesel powered equipment. DPM is the engine exhaust particulate matter from diesel engines and equipment and is a component of PM10 and PM2.5. As noted above, the project site is located within a busy international airport. The closest sensitive receptors to the project site are the residential areas approximately 1,200 meters (approximately 3,800 feet) to the south within El Segundo. The LSTs do not include a threshold for DPM. However, as shown in Table 6, PM10 and PM2.5 emissions would be substantially lower than the respective LST thresholds. Since DPM emissions are a component of PM10 and PM2.5, DPM emissions would be similarly low. Based on the emission levels and the distances to sensitive receptors, impacts from TACs would be less than significant.

[39] South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, Appendix C Mass Rate LST Look Up Tables, July 2008. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf.

Summary of Impacts

In summary, maximum daily construction emissions would be below the applicable LSTs and DPM emissions would be low and at a notable distance from sensitive receptors. Therefore, implementation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. The impact would be less than significant and no further evaluation in the EIR is required.

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

Less Than Significant Impact.

The use of diesel equipment during construction would 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 temporary nature of construction activities and the distance of the project site from receptors that would be sensitive to odors (the closest such sensitive receptor to the project site is residential development approximately 3,800 feet to the south in El Segundo), odors from construction-related diesel exhaust would not affect a substantial number of people. Therefore, construction of the proposed project would not create objectionable odors affecting a substantial number of people. Operations (i.e., number of passengers or aircraft operations) would not change as a result of the proposed project; therefore, the project would not have any operational impacts with respect to odors. The potential impact would be less than significant and no further evaluation in the EIR is required.

Although impacts related to construction-related odors would be less than significant, as indicated in Section III.b above, LAWA would implement a number of measures to address construction-related emissions associated with the proposed project. Some of these measures, in particular, Measure 1j, which would encourage the use of grid-based electric power over the use of diesel- or gasoline fueled generators, and Measure 1p, which would require off-road diesel-powered construction equipment of a certain size to meet USEPA Tier 4 (final) emission standards, would serve to reduce construction-related odors associated with project construction.

IV. BIOLOGICAL RESOURCES. *Would the project:*

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

No Impact. The project site and proposed construction staging area west of and adjacent to the project site are located in a highly-developed area within the center portion of the west side of LAX that, other than ornamental landscaping, is completely devoid of biological resources. While other areas within the airport boundary contain plant and animal species as well as habitats identified as sensitive, as further described below, none of the identified sensitive plant or animal species have been identified on the project site or the construction staging area, or in their immediate vicinity. Therefore, the proposed project would have no impacts to sensitive or special status species or habitats and no further evaluation in the EIR is required.

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 Wildlife or U.S. Fish and Wildlife Service?

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

b-c. No Impact. There are no riparian/wetland areas or wildlife movement corridors at or adjacent to the project site or proposed construction staging area. Therefore, no impacts to any riparian or other sensitive natural community or to any federally protected wetlands as defined by Section 404 of the Clean Water Act would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

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?

Potentially Significant Impact. Approximately 45 non-native ornamental trees (consisting of pine, juniper, bottle brush, American sweet gum, ficus, and olive trees) ranging in height from 8 feet to 50 feet are located around the perimeter of the CAL GO Building and surface parking area to the west. The trees would be removed as part of the proposed project. These trees may be used for nesting by raptors or birds. Removal of such trees would have the potential to result in impacts to migratory or nesting birds or raptors protected under the Migratory Bird Treaty Act and/or California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513. The potential for the proposed project to 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, will be evaluated in the EIR.

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)?

No Impact. There are no native trees, including trees protected by City of Los Angeles Ordinance No. 177404 (i.e., oak trees indigenous to California [excluding Scrub Oak], Southern California Black Walnut, Western Sycamore, or California Bay) at or adjacent to the project site or the proposed construction staging area. In addition, none of the ornamental trees located around the perimeter of the CAL GO Building and surface parking area to the west are located within a public right-of-way. Removal of the ornamental trees would not be subject to permitting requirements for street tree removal under Los Angeles Municipal Code, Chapter VI, Sections 62.169 and 62.170. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance and no further evaluation in the EIR is required.

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?

No Impact. There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that includes the project site or proposed construction staging area. The Dunes Specific Plan Area (i.e., Los Angeles/El Segundo Dunes), a designated Los Angeles County Significant Ecological Area, is located in the western portion of LAX, approximately 0.9 mile west of the project site, opposite Pershing Drive. The Dunes area is well removed from the project site and would not be affected

by the proposed project. Therefore, the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan and no further evaluation in the EIR is required.

V. CULTURAL RESOURCES. *Would the project:*

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

Potentially Significant Impact. Construction of the new SAAP would require the demolition and removal of the former CAL GO Building, which was formerly the general office building for Continental Airlines and is now vacant. The CAL GO Building was built in 1963, with a new west entrance to the building added in 1974. The CAL GO Building is over 50 years old, was constructed as the administrative headquarters for Continental Airlines during its peak years as an international airline, and is directly associated with the rapid growth and expansion of commercial aviation reflecting the period during which LAX became a major international airport. For these reasons, the CAL GO Building has been identified as potentially eligible for listing in the California Register of Historical Resources and/or as a Los Angeles Historic-Cultural Monument.[40] For similar reasons, the former CAL Training Center Building to the west of the project site has also been identified as potentially eligible for listing in the California Register of Historical Resources and/or as a Los Angeles Historic-Cultural Monument.[41] Furthermore, the CAL GO Building, CAL Training Center Building, and associated Continental Airlines complex of hangars, shops, and storage facilities were also identified as potentially eligible for listing in the California Register as a historic district.[42]

The integrity threshold for listing in the National Register of Historic Places differs from the criteria for listing in the California Register.[43] The CAL GO Building does not appear to be eligible for listing in the National Register of Historic Places due to the construction of an addition onto the west elevation, which has affected the integrity of the building. Because the period of significance associated with the Continental Airlines Complex (i.e., 1965-1982, reflecting Continental's occupancy as its headquarters) extends within the last 50 years, the district does not appear to be eligible for listing in the National Register. However, due to a high level of integrity, the CAL Training Center Building is individually eligible for listing in National Register.[44] No direct impacts to the CAL Training Center Building would occur as a result of the proposed project.

[40] Incorporated by Reference: PCR Services Corporation, Draft Historic Resources Assessment Report: Continental Airlines Facilities, 7300 Maintenance Road (APN: 4129-026-903) and 7300 World Way West (APN: 4129-026-903), Los Angeles, Los Angeles County, California, September 2013.

[41] Incorporated by Reference: PCR Services Corporation, Draft Historic Resources Assessment Report: Continental Airlines Facilities, 7300 Maintenance Road (APN: 4129-026-903) and 7300 World Way West (APN: 4129-026-903), Los Angeles, Los Angeles County, California, September 2013.

[42] Incorporated by Reference: PCR Services Corporation, Draft Historic Resources Assessment Report: Continental Airlines Facilities, 7300 Maintenance Road (APN: 4129-026-903) and 7300 World Way West (APN: 4129-026-903), Los Angeles, Los Angeles County, California, September 2013.

[43] State of California, Office of Historic Preservation, Department of Parks and Recreation, California Office of Historic Preservation Technical Assistance Series #6 California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register), undated.

[44] Incorporated by reference: City of Los Angeles, Los Angeles World Airports, Draft Environmental Impact Report for Los Angeles International Airport (LAX) Landside Access Modernization Program, (SCH 2015021014), Appendix J, LAX Preservation Plan, September 2016.

The proposed project EIR will evaluate whether the proposed project would cause a substantial adverse change in the significance of a historical resource as defined in the State CEQA Guidelines Section 15064.5. Specifically, the EIR will evaluate the potential for direct and indirect impacts to the CAL GO Building, CAL Training Center Building, and associated potential historic district.

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

Potentially Significant Impact. The LAX Master Plan Final EIR identified 36 previously recorded archeological sites within a radius of approximately two miles of LAX, including eight sites located on LAX property.[45] None of the eight sites identified on LAX property are located within the boundaries of the project site or in the immediate vicinity. The project site is a highly-disturbed area that has long been, and is currently being, used for airport uses. Any resources that may have existed on the site at one time are likely to have been displaced and, as a result, the overall sensitivity of the site with respect to buried resources is low. Limited excavation into native soils would occur, which would further limit the potential for project implementation to encounter archaeological resources. Nonetheless, the potential exists for the destruction of archaeological resources during construction, which would result in a potentially significant impact to archaeological resources. Therefore, the EIR for the proposed project will evaluate whether construction of the proposed project would cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5.

Operations of the proposed project would not have the potential to impact archaeological resources; therefore, project operations would not have a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5, and no further evaluation in the EIR is required.

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

Potentially Significant Impact. The LAX property lies in the northwestern portion of the Los Angeles Basin, a broad structural syncline with a basement of older igneous and metamorphic rocks overlain by thick younger marine and terrestrial deposits. The older deposits that underlie the LAX area are assigned to the Palos Verdes Sand formation, which is one of the better known Pleistocene age deposits in southern California. There are no known unique geologic features located on site. 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 Final EIR identified the presence of two vertebrate fossil occurrences within the airport area, three more in the immediate vicinity of the airport, and one within approximately 2 miles of the airport. 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.[46] Moreover, LAWA's Paleontological Management Treatment

[45] Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.9.1 – Historic/Architectural and Archaeological/Cultural Resources, April 2004.

[46] Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles

Plan[47] indicates that excavation activities at a depth greater than 6 feet in previously undisturbed soils have the potential to expose and damage potentially important fossils. As discussed for archaeological resources above, the project site is a previously disturbed area and the need for, and/or likelihood of, substantial excavation of native soils is low. Therefore, the likelihood of encountering paleontological resources during site development is considered to be very low. However, similar to archeological resources, the potential exists for the destruction of previously unidentified paleontological resources during construction, which would result in a potentially significant impact to paleontological resources. Therefore, the EIR for the proposed project will evaluate whether construction of the proposed project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Operation of the proposed project would not have the potential to impact paleontological resources; therefore, operation would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, and no further evaluation in the EIR is required.

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

Potentially Significant Impact. The project site is developed with aviation-related uses, and the airport is located within a highly urbanized area. Within the project area, traditional burial resources would likely be associated with the Native American group known as the Gabrieliño. Based on previous surveys conducted at LAX and the results of the record searches completed in 1995, 1997, and 2000 for the LAX Master Plan EIR, no traditional burial sites have been identified within the LAX boundaries or in the vicinity. If human remains are encountered, all grading and excavation activities in the vicinity would cease immediately and the appropriate LAWA authority would be notified. Therefore, the likelihood of encountering human remains during site development is considered to be very low. However, similar to archeological resources, the potential exists for the destruction of previously unidentified burial resources during construction, which would result in a potentially significant impact. Therefore, the potential for construction of the proposed project to disturb any human remains, including those interred outside of dedicated cemeteries, will be evaluated in the EIR.

Operation of the proposed project would not have the potential to disturb human remains; therefore, operation would not disturb any human remains, including those interred outside of formal or dedicated cemeteries, and no further evaluation in the EIR is required.

International Airport (LAX) Proposed Master Plan Improvements, Section 4.9.2 – Paleontological Resources, April 2004.

[47] Incorporated by reference: City of Los Angeles, Los Angeles World Airports, Final LAX Master Plan Mitigation Monitoring & Reporting Program: Paleontological Management Treatment Plan, prepared by Brian F. Smith and Associates, December 2005.

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?

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; however, there is no evidence of faulting on the project site, and it is not located within a State of California Earthquake Fault Zone (formerly known as an Alquist-Priolo Special Study Zone).[48,49] Geotechnical literature indicates that the Charnock Fault, a potentially active fault, may be located near or through the eastern portions of LAX property (the proposed project site is located approximately 1.5 miles farther west). 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 3 miles east of LAX (approximately 4.1 miles northeast of the proposed project site).[50,51]

The design and construction of the proposed project would comply with current Los Angeles Building Code (LABC) and Uniform Building Code (UBC) requirements to reduce potential risks associated with fault rupture or strong seismic ground shaking. The proposed project would provide a new SAAP on the west side of LAX and would be the sole full-access SAAP on World Way West after the existing SAAP 21 is taken out of service in May 2017. The proposed would not increase passenger capacity or long-term employment at LAX. Construction of the new SAAP would require the demolition and removal of the CAL GO Building. Adjoining the southeast portion of the existing CAL GO Building is the smaller AA OSF structure, which is a single-story building with a subterranean basement. The AA OSF is used by AA as a maintenance shop. The CAL GO Building and adjoining AA OSF structure are separated by a seismic joint all

[48] Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22 – Earth/Geology, April 2004; Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Technical Report 12, Earth/Geology, April 2004.

[49] Incorporated by reference: Ninyo & Moore, Geotechnical Evaluation Los Angeles World Airports Assessment Study of Properties 7270 and 7320 World Way West, Los Angeles, California, prepared for VCA Engineers, Inc., January 30, 2015.

[50] Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22 – Earth/Geology, April 2004; Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Technical Report 12, Earth/Geology, April 2004.

[51] Incorporated by reference: Ninyo & Moore, Geotechnical Evaluation Los Angeles World Airports Assessment Study of Properties 7270 and 7320 World Way West, Los Angeles, California, prepared for VCA Engineers, Inc., January 30, 2015.

the way through the underground garage and basement, making the two structures seismically and structurally independent. In addition, the proposed project includes construction of a new exterior wall skin to make the AA OSF structure secure, weather tight, and whole. Thus, removal of the CAL GO Building would not affect the seismic and structural integrity of the AA OSF. Therefore, implementation of the proposed project would not increase exposure of people or structures to risks or exacerbate risks associated with rupture of a known earthquake fault or strong seismic ground shaking. As such, potential impacts to people or structures to substantial adverse effects resulting from rupture of a known earthquake fault or strong seismic ground shaking would be less than significant with the implementation of the proposed project and no further evaluation in the EIR 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. A geotechnical evaluation of the proposed project site performed for the demolition of the CAL GO Building found no observed groundwater in borings drilled to depths of 26½ feet. Literature reviews performed as part of the evaluation found historical groundwater documented at depths ranging from approximately 40 feet below ground service (in a State of California Seismic Hazard Zone Report dated 1998) to 90 to 95 feet below surface (based on wells located on the project site as documented on the State of California Water Resources Control Board's GeoTracker website, accessed in 2014). The geotechnical report noted that fluctuations in the level of groundwater at the site may occur due to variations in ground surface topography, subsurface stratification, rainfall, irrigation practices, and other factors.[52] This groundwater depth indicates that the site has a very low susceptibility to liquefaction.[53]

Strong ground shaking will also tend to compact loose to medium dense deposits of partially saturated granular soils and could result in seismic settlement of foundations and the ground surface at LAX. Due to variations in material type, seismic settlements would tend to vary considerably across LAX, but are generally estimated to be between negligible and 0.5 inch; the overall potential for damaging seismically-induced settlement is considered to be low.[54,55]

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[52] Incorporated by reference: Ninyo & Moore, Geotechnical Evaluation Los Angeles World Airports Assessment Study of Properties 7270 and 7320 World Way West, Los Angeles, California, prepared for VCA Engineers, Inc., January 30, 2015.

[53] Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22 – Earth/Geology, April 2004; Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Technical Report 12, Earth/Geology, April 2004.

[54] Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22 – Earth/Geology, April 2004; Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Technical Report 12, Earth/Geology, April 2004.

[55] Incorporated by reference: Ninyo & Moore, Geotechnical Evaluation Los Angeles World Airports Assessment Study of Properties 7270 and 7320 World Way West, Los Angeles, California, prepared for VCA Engineers,

Seismically-induced ground shaking can also cause slope-related hazards through various processes including slope failure, lateral spreading,[56] flow liquefaction, and ground lurching.[57] Because the project site is flat, there is no potential for slope failures at the project site.

The California Department of Conservation (CDC) is mandated by the Seismic Hazards Mapping Act of 1990[58] to identify and map the state's most prominent earthquake hazards in order to help avoid damage resulting from earthquakes. The CDC's Seismic Hazard Zone Mapping Program charts areas prone to liquefaction and earthquake-induced landslides throughout California's principal urban and major growth areas. According to the Seismic Hazard Map for the Inglewood Quadrangle, no potential liquefaction zones are located within the LAX area. Isolated zones of potential seismic slope instability are identified within the dunes area to the west of the proposed project site.[59] Given the flat topography of the project site, it would not be subject to slope instability and the potential instability within the dune area to the west would not pose a risk to the project site.

In summary, the potential for seismic-related ground failure at the proposed project site due to liquefaction is considered low. All construction would be designed in accordance with the provisions of the UBC and the LABC. In addition, the proposed project would not increase passenger capacity or long-term employment at LAX and, therefore, would not increase exposure of people or structures to substantial adverse risks or exacerbate risks associated with seismic-related ground failure. Potential impacts associated with seismic-related ground failure, including liquefaction, would be less than significant with the implementation of the proposed project and no further evaluation in the EIR 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.[60] Implementation of the proposed project would not result in the exposure of people or structures to the risk of landslides or exacerbate landslide risks during a seismic event. Therefore, no impacts resulting from

Inc., January 30, 2015.

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

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

58 California Public Resources Code 2690-2699.6, Seismic Hazards Mapping Act.

59 Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22 – Earth/Geology, April 2004; City of Los Angeles, Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Technical Report 12, Earth/Geology, April 2004.

60 Incorporated by reference: City of Los Angeles, Department of City Planning, Safety Element of the City of Los Angeles General Plan, Exhibit C, Landslide Inventory & Hillside Areas in the City of Los Angeles, November 1996.

landslides would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

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

Less Than Significant Impact. The potential for soil erosion on the project site is low due to the level topography of the project site and the fact that the site consists almost entirely of impervious surfaces, the only exception being small areas of ornamental landscaping. The proposed project would result in the demolition of existing pavement, excavation, and use of fill during construction. LAWA would comply with LABC Sections 91.7000 through 91.7016, which include construction requirements for grading, excavation, and use of fill. Compliance with these requirements would reduce the potential for wind or waterborne erosion. In addition, the LABC requires an erosion control plan to be reviewed by the Department of Building and Safety prior to construction if grading exceeds 200 cubic yards and occurs during the rainy season (between November 1 and April 15). As a result, the proposed project would not result in substantial soil erosion.

There is a limited amount of topsoil on the project site associated with existing ornamental landscaping. Removal of the landscaped areas would result in a loss of topsoil. However, due to the limited area of landscaping to be removed, the loss of topsoil would not be substantial. Therefore, potential impacts related to soil erosion and the loss of topsoil would be less than significant and no further evaluation in the EIR is required.

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

Less Than Significant Impact. Settlement of foundation soils beneath engineered structures or fills typically results from the consolidation and/or compaction of the foundation soils in response to the increased load induced by the structure or fill. The presence of undocumented and typically weak artificial fill at LAX creates the potential for settlement.[61] The Lakewood Formation also includes some silt and clay layers prone to settlement. However, foundation design features and construction methods can reduce the potential for excessive settlement at LAX, including the project site,[62] and the overall potential for damaging settlement is considered low.[63] Therefore, implementation of the proposed project would not adversely affect a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. The potential

[61] Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22 – Earth/Geology, April 2004; Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Technical Report 12, Earth/Geology, April 2004.

[62] Incorporated by reference: Ninyo & Moore, Geotechnical Evaluation Los Angeles World Airports Assessment Study of Properties 7270 and 7320 World Way West, Los Angeles, California, prepared for VCA Engineers, Inc., January 30, 2015.

[63] Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22 – Earth/Geology, April 2004; Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Technical Report 12, Earth/Geology, April 2004.

impact would be less than significant with the implementation of the proposed project and no further evaluation in the EIR is required. See also Sections VI.a.iii and VI.a.iv above.

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. Fill materials located in some portions of the LAX area could be prone to expansion, and some portions of the Lakewood Formation found beneath the eastern portion of LAX may also be susceptible, due to their higher content of clay and silt.[64] The new building area that would be constructed as part of the proposed project could be subject to the effects of expansive soils. As project construction would occur in accordance with LABC Sections 91.7000 through 91.7016, which include construction requirements for grading, excavation, and foundation work, the potential for hazards to occur as a result of expansive soils would be minimized. The design and construction of the proposed project would comply with current UBC requirements and would not result in any structural or engineering modifications that could increase exposure of people or structures to risk associated with expansive soils. The potential impact would be less than significant with the implementation of the proposed project and no further evaluation in the EIR 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 would not use septic tanks or alternative wastewater disposal systems. Therefore, no impacts related to the ability of onsite soils to support septic tanks or alternative wastewater systems would occur with implementation of the proposed project and no further evaluation in the EIR 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 would generate greenhouse gas (GHG) emissions from vehicle exhaust associated with construction-related activities, including off-road construction equipment, construction worker commuting, and haul/vendor truck trips. During operations, the proposed SAAP would generate indirect GHG emissions from energy use associated with lighting, HVAC equipment, and vehicle screening and security equipment. Existing vehicle operations would not change with the addition of the new SAAP; therefore, operational vehicle emissions were not evaluated.

[64] Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22 – Earth/Geology, April 2004; Incorporated by reference: City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Technical Report 12, Earth/Geology, April 2004.

Significance Thresholds

Section 15064.7 of the State CEQA Guidelines defines a threshold of significance as an identifiable quantitative, qualitative, or performance level of a particular environmental effect, compliance with which determines the level of impact significance. CEQA gives wide latitude to lead agencies in determining what impacts are significant and does not prescribe thresholds of significance, analytical methodologies, or specific mitigation measures. CEQA leaves the determination of significance thresholds to the reasonable discretion of the lead agency and encourages lead agencies to develop and publish thresholds of significance to use in determining the significance of environmental effects. However, neither the SCAQMD nor the City of Los Angeles have yet established project-level, specific, quantitative significance thresholds for GHG emissions. State CEQA Guidelines Section 15183.5 encourages lead agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. However, the City of Los Angeles has not developed a Greenhouse Gas Reduction Plan meeting the requirements set forth in State CEQA Guidelines Section 15183.5.

On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for projects where the SCAQMD is the lead agency.[65] For industrial projects where SCAQMD is the lead agency, the SCAQMD's adopted threshold is 10,000 metric tons of carbon dioxide equivalent per year ($MTCO_2eq/yr$). Selection of 10,000 $MTCO_2eq/yr$ as a mass emissions threshold of significance for industrial projects was based largely on the GHG emissions associated with the natural gas consumption characteristics of numerous facilities evaluated by the SCAQMD. Selection of that threshold for industrial projects also took into consideration that industrial facilities typically contain stationary source equipment which is largely permitted or regulated by the SCAQMD, consequently providing some ability to directly address GHG emissions. At this time, this adopted threshold applies to only industrial projects where the SCAQMD is the lead agency.

While SCAQMD is not the lead agency for the proposed project, the source of GHG emissions associated with operation of the proposed project is considered to be comparable to that of a stationary industrial source, as was the primary source of interest in the SCAQMD's establishment of that GHG threshold. Specifically, the main source of GHG emissions for the proposed project is related to the energy demand associated with the proposed SAAP; the energy provided to meet project-related demand would be primarily from a power plant(s) (i.e., stationary industrial source of GHG emissions). As a result, for the purposes of this analysis, the adopted 10,000 $MTCO_2e/yr$ threshold was used.

Estimated GHG Emissions

Sources of GHG emissions during construction would include construction equipment, haul trucks, and construction worker commuting trips. Construction-related GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2, a statewide land use emissions computer model that estimates construction and operational

[65] South Coast Air Quality Management District, Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #8, Diamond Bar, January 28, 2009. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-8/ghg-meeting-8-minutes.pdf?sfvrsn=2.

emissions from a variety of land use projects.[66] **Table 7** summarizes emissions from the proposed project construction. See Appendix A-1 for detailed calculations.

Table 7
Greenhouse Gas Emissions Summary for the Proposed Project (Construction)

	Emissions (metric tons per year)			
Year	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
2018	728	<1	<1	730
2019	75	<1	<1	76
Total	803	<1	<1	806

Key:
CH_4 = methane CO_2e = carbon dioxide equivalent
CO_2 = carbon dioxide N_2O = nitrous oxide

Source: Appendix A-1 of this Initial Study.

The SCAQMD recommends that construction emissions be amortized over the project lifetime (i.e., 30 years) and then be added to operational emissions so that GHG emission reduction measures also capture construction.[67] Because GHG emissions are inherently cumulative, construction-related GHG emissions are evaluated by amortizing total construction GHG emissions over a 30-year project lifespan and adding that yearly value to operational GHG emissions. The 30-year amortized construction emissions for the proposed project are 27 metric tons CO_2e per year.

Operational GHG emissions would occur indirectly from energy used at the proposed SAAP. Features at the facility that would consume energy would include lighting, HVAC, and security and vehicle screening equipment. Resulting future operational GHG emissions were compared to existing operational emissions associated with SAAP 21 to determine project-related impacts.

As described in Section III.a, the two inspection booths at SAAP 21 are powered by generators that operate 24 hours per day, 7 days a week. GHG emissions related to use of these generators were estimated using USEPA AP-42 emission factors. The proposed SAAP would operate on grid power. GHG emissions associated with energy demand from the proposed SAAP were estimated based on CalEEMod default grid emission factors for LADWP.

Table 8 summarizes total GHG emissions associated with the proposed project, including operational emissions and amortized construction emissions. Detailed calculations are provided in Appendices A-1 and A-3. As shown in Table 8, the total annual GHG emissions associated with the proposed project would be well below the 10,000 $MTCO_2e$/yr threshold. Combined operational and amortized construction emissions of GHG would be higher than existing emissions associated with SAAP 21. However, when comparing impacts from operations only, the operational GHG emissions associated with the proposed project would be lower than operational GHG emissions associated with SAAP 21. This is due to the fact that, although the proposed SAAP would generate a higher energy demand from the addition of state-of-the-art vehicle inspection and security

[66] California Air Pollution Control Officers Association, California Emissions Estimator Model (CalEEMod) Homepage. Available: http://www.caleemod.com/, accessed December 21, 2015.

[67] South Coast Air Quality Management District, Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, October 2008.

equipment, the increased operational energy demand would be offset by the use of grid power instead of generator power, which is currently used at SAAP 21.

Table 8
Greenhouse Gas Emissions from Combined Operations & Construction

	Emissions (metric tons per year)			
	CO_2	**CH_4**	**N_2O**	**CO_2e**
Existing GHG Emissions				
SAAP 21 Operational Energy Emissions	87	<1	<1	87
Proposed Project GHG Emissions				
Operational Energy-Related Emissions	83	<1	<1	83
Amortized Construction Emissions	27	<1	<1	27
Total Proposed Project Emissions	**110**	**<1**	**<1**	**110**
Net Emissions				**23**
Threshold				10,000
Significant?				No

Key:
CH_4 = methane CO_2e = carbon dioxide equivalent
CO_2 = carbon dioxide N_2O = nitrous oxide

Source: Appendices A-1 and A-3 of this Initial Study.

The proposed project would comply with LAGBC Tier 1 standards; however, the emission estimates above do not reflect energy efficiency measures that would be implemented in accordance with these standards. Actual emissions may be lower than calculated, as sustainable design features to reduce energy and electricity use would be implemented.

As GHG emissions from the proposed project would be less than the SCAQMD adopted significance threshold, the impact would be less than significant and no further evaluation in the EIR is required.

Standard Control Measures

As shown above, impacts related to GHG would be less than significant; therefore, no mitigation measures are required. However, as discussed in Section III.b, Standard Control Measure LAX-AQ-1, Construction-Related Air Quality Standard Control Measures, would be applied to the proposed project to reduce construction-related air pollutant emissions. This standard control measure would also reduce GHG emissions associated with construction of the proposed project. This measure is listed in Section III.b above.

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

Less Than Significant Impact. A number of international initiatives have been developed to address GHG emissions and global climate change. Various statewide initiatives have also been enacted to reduce the state's contribution to GHG emissions and to develop climate change adaptation strategies. Regional and local plans and regulations have also been adopted that address

GHG emissions. Key federal, state, regional, and local plans, policies, and regulations adopted for the purpose of reducing the emissions of GHG are identified below.

Existing Plans, Policies, and Regulations

State Plans, Policies, and Regulations

The legal framework for GHG emission reduction in California has come about through Executive Orders, legislation, and regulation. The major components of California's climate change initiatives are reviewed below.

California Environmental Quality Act

CEQA requires lead agencies to consider the reasonably foreseeable adverse environmental effects of projects they are considering for approval. GHG emissions have the potential to adversely affect the environment because they contribute to global climate change. In turn, global climate change has the potential to raise sea levels, affect rainfall and snowfall, and affect habitat.

Senate Bill (SB) 97, enacted in August 2007, requires the State Office of Planning and Research (OPR) to prepare guidelines to submit to the California Natural Resources Agency (CNRA) regarding feasible mitigation of GHG emissions or the effects of GHG emissions as required by CEQA.[68] The CNRA adopted amendments to the State CEQA Guidelines addressing GHG emissions on December 30, 2009. The amendments became effective on March 18, 2010. The guidelines are reflected in this EIR.

The significance of GHG emissions are specifically addressed in State CEQA Guidelines Section 15064.4. Section 15064.4 calls for a lead agency to make a "good-faith effort" to "describe, calculate or estimate" GHG emissions in CEQA environmental documents. Section 15064.4 further states that the analysis of GHG impacts should include consideration of (1) the extent to which the project may increase or reduce GHG emissions; (2) whether the project emissions would exceed a locally applicable threshold of significance; and (3) the extent to which the project would comply with "regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions." The guidelines also state that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including plans or regulations for the reduction of GHG emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (State CEQA Guidelines Section 15064(h)(3)). The State CEQA Guidelines do not, however, set a numerical threshold of significance for GHG emissions.

Title 24 Energy Standards

Although not originally intended to reduce GHG emissions, California's Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. The latest amendments were made in June 2015 and went into effect on January 1, 2017. The premise for the standards is that

[68] California Senate Bill 97, August 24, 2007.

energy efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and onsite fuel combustion (for example, for water heating or from the use of onsite generators) result in GHG emissions. Therefore, increased energy efficiency in buildings results in fewer GHG emissions on a building-by-building basis.

Green Building Standards

The 2013 California Green Building Standards Code (24 CCR Part 11; also referred to as CALGreen)[69] took effect January 1, 2014. The Green Building Standards, as updated (2016), require that every new building constructed in California reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low-pollutant-emitting materials. They also require separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects and mandatory inspections of energy systems (e.g., heat furnace, air conditioner, and mechanical equipment) for nonresidential buildings larger than 10,000 square feet to ensure that all are working at their maximum capacity and according to their design efficiencies.

Executive Order S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets for all of California: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.[70]

Executive Order B-30-15

In 2015, California Governor Edmund G. Brown issued Executive Order B-30-15 to establish a California GHG emissions reduction target of 40 percent below 1990 levels by 2030.[71]

California Assembly Bill 32 (AB 32)

AB 32, titled the California Global Warming Solutions Act of 2006 (Pavley) and signed by Governor Schwarzenegger in September 2006, required CARB to adopt regulations to require the reporting and verification of Statewide GHG emissions and to monitor and enforce compliance with the program.[72] In general, the bill required CARB to reduce Statewide GHG emissions to the equivalent of those in 1990 by 2020. CARB adopted regulations in December 2007 for mandatory GHG emissions reporting. In December 2008, CARB approved the AB 32 Climate Change Scoping Plan (Scoping Plan) outlining the state's strategy to achieve the 2020 GHG emissions limit. The Scoping Plan proposes a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify California's energy sources, save energy, create new jobs, and enhance public health. On August 24, 2011, the Scoping Plan was re-approved by CARB, including the final supplement to its functional equivalent document, as required by CEQA. The First Update to the Scoping Plan, which will guide the continued development and implementation of the state's efforts to fight climate change, was approved by CARB on May 22, 2014.

[69] 24 California Code of Regulations, Part 11, California Building Standards Commission, 2016 California Green Building Standards Code (CALGreen).
[70] California Executive Order S-3-05, June 1, 2005.
[71] California Executive Order B-30-15, April 29, 2015.
[72] California Assembly Bill 32, September 27, 2006.

Part of the Scoping Plan includes an economy-wide cap-and-trade program, which sets a statewide limit on sources responsible for 85 percent of California's GHG emissions, and established a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The program is designed to provide covered entities the flexibility to seek out and implement the lowest-cost options to reduce emissions. The final cap-and-trade plan was approved on October 21, 2011 and went into effect on January 1, 2013.

At the time of preparation of this Initial Study, CARB was preparing a second update to the Scoping Plan to reflect the Executive Order B-30-15 GHG reduction target of 40 percent below 1990 levels by 2030, a target also identified in SB 32, described below.[73]

California Senate Bill 32 (SB 32)

SB 32, which extends the California Global Warming Solutions Act of 2006 (AB 32) beyond 2020, was approved in the 2015/2016 legislative session and approved by the Governor on September 8, 2016.[74] SB 32 requires CARB to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions to ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the 1990 statewide greenhouse gas emissions limit no later than December 31, 2030, the target established by Executive Order B-30-15. CARB recently released a draft strategy for achieving this goal, which takes into account the key programs associated with implementation of the AB 32 Scoping Plan--such as GHG reduction programs for cars, trucks, fuels, industry, and electrical generation--and builds upon, in particular, existing programs related to the Cap-and-Trade Regulation; the Low Carbon Fuel Standard; much cleaner cars, trucks, and freight movement; power generation for the State using cleaner renewable energy; and strategies to reduce methane emissions from agricultural and other wastes by using it to meet the State's energy needs. The proposed plan also addresses, for the first time, GHG emissions from natural and working lands, including the agriculture and forestry sectors.[75]

California Senate Bill 375 (SB 375)

Under SB 375, the Sustainable Communities and Climate Protection Act of 2008, each metropolitan planning organization (MPO) in the state is required to develop Sustainable Community Strategies through integrated land use and transportation planning and to attain per capita GHG reduction targets for passenger vehicles set by CARB by 2020 and 2035.[76] CARB issued an 8percent per capita reduction target for the SCAG region for 2020 and a target of 13 percent per capita reduction by 2035. SCAG adopted the latest Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS) for the six-country Southern California region on April 7, 2016, as described below.[77]

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[73] California Air Resources Board, AB 32 Scoping Plan Homepage, last reviewed January 23, 2017. Available: https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm, accessed on February 3, 2017.

[74] California Senate Bill 32, September 8, 2016.

[75] California Air Resources Board, The 2017 Climate Change Scoping Plan Update – The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target, January 20, 2017.

[76] California Senate Bill 375, September 30, 2008.

[77] Southern California Association of Governments, Final 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life, adopted April 7, 2016. Available: http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx.

California Assembly Bill 1493 (AB 1493)

Enacted on July 22, 2002, AB 1493, commonly known as the Pavley law (named for the then-Assembly Member who sponsored the bill), required CARB to develop and adopt regulations that will lead to a reduction in GHGs emitted by passenger vehicles and light-duty trucks. Subsequent regulations adopted by CARB, often referred to as the Pavley regulations, apply to 2009 through 2016 vehicles. CARB estimated that the regulations would reduce GHG emissions from the light-duty and passenger vehicle fleet by 18 percent in 2020 and by 27 percent in 2030, compared to recent years.[78] In 2011, the U.S. Department of Transportation, USEPA, and California announced a single timeframe for proposing fuel and economy standards, thereby aligning the Pavley regulations with the federal standards for passenger cars and light-duty trucks. Emission estimates included in this analysis account for the Pavley standards.

California Advanced Clean Cars Program

In January 2012, CARB approved a new emissions-control program for vehicles of model years 2017 through 2025. The program combines the control of smog, soot, and GHG into a single package of standards referred to as the Advanced Clean Cars program (13 CCR §1962.1 and 1962.2). The Advanced Clean Cars requirements include new GHG standards for model year 2017 to 2025 vehicles. The Advanced Clean Cars Program also includes amendments to the low emission vehicle (LEV) amendments (referred to as the LEV III regulations; 13 CCR §1900 et seq.), a zero emission vehicle (ZEV) regulations, and a regulation referred to as the Clean Fuels Outlet Regulation. The LEV III regulations are aimed at reducing criteria pollutant and GHG emissions from light- and medium-duty vehicles. The ZEV regulation requires manufacturers to produce an increasing number of the very cleanest cars available, including battery electric, fuel cell, and plug-in hybrid electric vehicles. The Clean Fuels Outlet regulation is designed to ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of the new advanced technology vehicles as they come to market.[79,80]

Executive Order S-01-07 and the Low Carbon Fuel Standard

California Executive Order S-01-07 established a statewide goal to reduce the carbon intensity of transportation fuels sold in California by at least 10 percent by 2020 from 2005 levels. The Executive Order also mandated the creation of Low Carbon Fuel Standard (LCFS) for transportation fuels. The LCFS requires that the lifecycle GHG emissions for the mix of fuels sold in California decline on average. Each fuel provider may meet the standard by selling fuel with lower carbon content, using previously banked credits from selling fuel that exceeded the LCFS, or purchasing credit from other fuel providers who have earned credits.[81]

Renewable Portfolio Standard

Senate Bill 1078 (SB 1078; Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at

[78] California Air Resources Board, Fact Sheet: Climate Change Emission Control Regulations, December 19, 2004. Available: https://www.arb.ca.gov/cc/ccms/factsheets/cc_newfs.pdf.

[79] California Air Resources Board, Advanced Clean Cars Program Homepage, last reviewed January 18, 2017. Available: https://www.arb.ca.gov/msprog/acc/acc.htm.

[80] California Air Resources Board, News Release: California Air Resources Board Approves Advanced Clean Car Rules, January 27, 2012. Available: https://www.arb.ca.gov/newsrel/newsrelease.php?id=282.

[81] 17 California Code of Regulations, Section 95480 et seq., Low Carbon Fuel Standard.

least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, the Governor signed Executive Order S-14-08, which expands the State's Renewable (Energy) Portfolio Standard (RPS) to 33 percent renewable power by 2020. On September 15, 2009, the Governor issued Executive Order S-21-0911 requiring CARB, under its AB 32 authority, to adopt regulations to meet a 33 percent RPS target by 2020. The CARB regulations would use a phased-in or tiered requirement to increase the amount of electricity from eligible renewable sources over an eight-year period beginning in 2012. CARB adopted the regulations in September 2010.

In March 2011, the Legislature passed Senate Bill XI-2 (SB XI-2), which was signed into law by the Governor the following month. SB XI-2 requires utilities to procure renewable energy products equal to 33 percent of retail sales by December 31, 2020, and also established interim targets: 20 percent by December 31, 2013, and 25 percent by December 31, 2016. SB XI-2 also applies to publicly-owned utilities in California. According to data available from the Los Angeles Department of Water and Power (LADWP), the utility provider for the City of Los Angeles, approximately 20 percent of its electricity purchases in 2014 were from eligible renewable sources. Senate Bill SB 350 of 2015 (Chapter 547, Statutes of 2015) increased the renewable portfolio standard to 50 percent by the year 2030.

Regional Plans, Policies, and Regulations

Regional Transportation Plan/Sustainable Communities Strategy

In accordance with Senate Bill 375, described above, SCAG developed a Sustainable Communities Strategy to reduce per capita GHG emissions within its jurisdiction. SCAG adopted the 2012-2035 RTP/SCS on April 4, 2012, and subsequent amendments of project lists were approved on June 6, 2013 and September 11, 2014. The 2012-2035 RTP/SCS aimed to reduce emissions from transportation sources to comply with SB 375 and meet SB 375 regional GHG emission reduction targets for light duty vehicles, improve public health, and reduce air emissions. On April 7, 2016, SCAG's Regional Council adopted the 2016-2040 RTP/SCS. The 2016-2040 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The Plan charts a course for closely integrating land use and transportation. It outlines more than $556.5 billion in transportation system investments through 2040.[82]

Local Plans, Policies, and Regulations

Green LA

In May 2007, the City of Los Angeles introduced *Green LA - An Action Plan to Lead the Nation in Fighting Global Warming* (Green LA).[83] Green LA presents a framework targeted to reduce the City's GHG emissions by 35 percent below 1990 levels by 2030. The plan calls for an increase in the City's use of renewable energy to 35 percent by 2020 in combination with promoting water conservation, improving the transportation system, reducing waste generation, greening the ports and airports, creating more parks and open space, and greening the economic sector. Green LA identifies objectives and actions in various focus areas, including airports. The

[82] Southern California Association of Governments, Final 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life, adopted April 7, 2016. Available: http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx.

[83] City of Los Angeles, Green LA: An Action Plan to Lead the Nation in Fighting Global Warming, May 2007.

goal for Los Angeles' airports is to "green the airports," and the following actions are identified: 1) fully implement the Sustainability Performance Improvement Management System (discussed below); 2) develop and implement policies to meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) green building rating standards in future construction; 3) improve recycling, increase use of alternative fuel sources, increase use of recycled water, increase water conservation, reduce energy needs, and reduce GHG emissions; and 4) evaluate options to reduce aircraft-related GHG emissions.

Climate LA

In 2008, the City of Los Angeles followed up Green LA with an implementation plan called *Climate LA – Municipal Program Implementing the Green LA Climate Action Plan* (Climate LA).[84] A Departmental Action Plan for LAWA is included in Climate LA, which identifies goals to reduce CO_2 emissions 35 percent below 1990 levels by 2030 at LAX and the other LAWA airports, implement sustainability practices, and develop programs to reduce the generation of waste and pollutants. Actions are specified in the areas of aircraft operations, ground vehicles, buildings and facilities, and construction.

Executive Directive No. 10

As part of the City's efforts to reduce GHG emissions and promote long-term sustainability, in July 2007, Mayor Antonio Villaraigosa issued Executive Directive No. 10[85] regarding environmental stewardship practices. Consistent with the goal specified in Green LA to make the City of Los Angeles a worldwide leader in green buildings, Executive Directive No. 10 requires that City departments, including LAWA, create and adopt a "Statement of Sustainable Building Policies," which should encompass sustainable design, energy and atmosphere, materials and resources, water efficiency, landscaping, and transportation resources. In addition, City departments and offices must create and adopt sustainability plans that include all the policies, procedures, programs, and policies that are designed to improve internal environmental efficiency. Finally, City departments are required to submit annual sustainability reports to the Mayor for review. Climate LA, which was adopted subsequent to Executive Directive No. 10, also includes goals supportive of green building and energy efficiency through building design and retrofits.

Sustainable City Plan

In 2014, Mayor Eric Garcetti launched the City's first-ever Sustainable City Plan ("pLAn"). The pLAn is a comprehensive and actionable policy roadmap that prepares the City for an environmentally healthy, economically prosperous, and equitable future for all.[86] Mayor Garcetti released the pLAn in April 2015 along with a corresponding Executive Directive (Executive Directive No. 7)[87] that incorporates the pLAn into city-wide management. The

[84] City of Los Angeles, Climate LA - Municipal Program Implementing the Green LA Climate Action Plan, 2008.

[85] City of Los Angeles, Mayor Antonio R. Villaraigosa, Executive Directive No. 10, Subject: Sustainable Practices in the City of Los Angeles, July 18, 2007. Available: http://lacity.cityofla.acsitefactory.com/sites/g/files/wph281/f/mayorvillaraigosa331283124_ 07182007.pdf, accessed July 15, 2016.

[86] City of Los Angeles, Sustainable City pLAn, Transforming Los Angeles, Environment - Economy - Equity, April 2015. Available: http://www.lamayor.org/sites/g/files/wph446/f/landing_pages/files/The%20pLAn.pdf.

[87] City of Los Angeles, Mayor Eric Garcetti, Executive Directive No. 7, Subject: Sustainable City pLAn, April 8, 2015. Available: https://www.lacity.org/sites/g/files/wph281/f/Executive_Directive_No._7_Sustainable_City_pLAn.pdf.

framework of pLAn is organized into three sections – environment, economy, and equity – addressing a total of 14 topics, each of which sets forth a vision of things to be accomplished in the next 20 years and highlighted near- and long-term outcomes. With respect to the environment, the topics are local water, local solar, energy-efficient buildings, carbon and climate leadership, and waste and landfills. Through the pLAn, Mayor Garcetti committed the City to becoming a national leader in carbon reduction and climate action by eliminating coal from the City's energy mix, prioritizing energy efficiency, and inspiring other cities to take similar action. The Plan sets targets of reducing GHG emissions below 1990 levels by at least 45 percent by 2025, 60 percent by 2035, and 80 percent by 2050.

City of Los Angeles Green Building Code (LAGBC)

In December 2013, the Los Angeles City Council approved Ordinance No. 182,849, which updated Chapter IX of the Los Angeles Municipal Code by amending certain provisions of Article 9 to incorporate by reference portions of the 2013 CALGreen Code and adding other conservation-related measures to the LAGBC for residential and non-residential development. The requirements of the adopted LAGBC, as updated (2017),[88] apply to new building construction, building renovations, and building additions within the City of Los Angeles. Specific mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2) nonresidential and high-rise residential buildings; and (3) additions and alterations to nonresidential and high-rise residential buildings. The Los Angeles Green Building Code Tier 1 standards are applicable to all projects with a Los Angeles Department of Building and Safety (LADBS) permit-valuation over $200,000.

LAWA Sustainability Plan

LAWA's Sustainability Plan,[89] developed in April 2008, describes LAWA's current sustainability practices and sets goals and actions that LAWA will undertake to implement the initiatives described above (Green LA, Climate LA, and LAGBC). The Sustainability Plan presents initiatives for the fiscal year 2008-2009 and long-term objectives and targets to meet the fundamental objectives identified above. Included in those targets is Target 5A – Reduce GHG emissions levels to 35 percent below 1990 levels by 2030.

LAWA Design and Construction Handbook

In 2008, LAWA developed *Sustainable Airport Planning, Design and Construction Guidelines for Implementation on All Airport Projects*, which were subsequently updated in 2009 and 2010.[90] These guidelines were developed to provide a comprehensive set of performance standards focusing on sustainability specifically for airport projects on a project-level basis. Based on these guidelines, LAWA implemented numerous steps to increase its sustainability practices related to daily airport operations, many of which directly or indirectly contributed to a reduction in GHG emissions. Actions that LAWA undertook included promoting and expanding non-stop shuttle services to the airport in an effort to reduce the number of vehicle trips to the airport, establishing an employee Rideshare Program, using alternative fuel vehicles, purchasing

[88] City of Los Angeles, Los Angeles Municipal Code, Chapter IX, Article 9, Green Building Code, as amended.
[89] Incorporated by reference: City of Los Angeles, Los Angeles World Airports, Los Angeles World Airports Sustainability Plan, April 2008.
[90] City of Los Angeles, Los Angeles World Airports, Sustainable Airport Planning, Design and Construction Guidelines for Implementation on All Airport Projects, Version 5.0, February 2010.

renewably-generated Green Power from LADWP, and reducing electricity consumption by installing energy-efficient lighting, variable demand motors on terminal escalators, and variable frequency drives on fan units at terminals and LAWA buildings.[91]

Subsequently, LAWA consolidated its design standards into the LAWA Design and Construction Handbook (DCH), which includes sustainable guidelines for all construction projects. These DCH Sustainability Guidelines replace the previously-adopted guidelines. In accordance with the DCH Sustainability Guidelines, LAWA measures its sustainable performance in accordance with social, economic, and environmental impacts. The current Sustainability Guidelines are consistent with the LAGBC, which, as noted above, requires that all building projects with an LADBS permit-valuation over $200,000 achieve LAGBC Tier 1 conformance, to be certified by an LADBS inspector during final plan check (on the issued building permit) and validated by the LADBS inspector during final inspection (on the Certificate of Occupancy). Should a project pose unique issues/circumstances based on the scope and/or location of work, LAWA may require more prescriptive approaches to resolving issues such as energy performance, site drainage, etc.[92]

LAWA Commitment to Carbon Management Goals

In August 2016, LAWA adopted an internal commitment to reduce GHG emissions from LAWA owned and operated sources below 1990 levels 45 percent by 2025, 60 percent by 2035, and 80 percent by 2050.[93] Additionally, LAWA achieved Airport Carbon Accreditation (ACA) at "Level 2 Reduction" from the Airport Council International (ACI).[94] Airports are certified under ACA at four progressively stringent levels of participation with recognition of improvements at each stage. The first stage, Level 1 Mapping, requires airports to produce a Scope 1 and 2 "carbon footprint" for the airport, along with evidence of a publicly available environmental/carbon policy endorsed at the highest level of airport management. Independent verification of an airport's carbon footprint is required on entry into the program, and then again every two years on renewal at the same level, or upon each upgrade. The ACA program notes that the carbon footprint serves as the basis for developing carbon management and engagement plans (Level 2 Reduction and Level 3 Optimization). An airport may then also seek to achieve carbon neutrality for the carbon dioxide (CO_2) emissions under its direct control (Scope 1 and 2) by offsetting its residual emissions which it cannot reduce by other means (Level 3+ Neutrality).

It is important to note that LAWA's internal commitment to the GHG emissions reduction goals identified above, as reflected in the ACI certification that LAWA has achieved for Level 2 Reduction, takes into account a wide array of existing and anticipated GHG reduction programs and improvements, which will continue to be implemented and may be refined, adjusted, and

[91] City of Los Angeles, Los Angeles World Airports, Los Angeles World Airports Sustainability Report 2015. Available: http://www.laxsustainability.org/documents/Sustainability_Report_2015.pdf, accessed September 6, 2016.

[92] City of Los Angeles, Los Angeles World Airports, 2016 Design and Construction Handbook: Environmental - Sustainability, July 2016. Available: http://www.lawa.org/uploadedFiles/LAXDev/DCH/Environmental/Sustainability%20CALGreen%20LEED.pdf.

[93] Flint, Deborah, Chief Executive Officer, Los Angeles World Airports, Memorandum, Subject: LAWA's Commitment to Carbon Management Goals, August 31, 2016.

[94] City of Los Angeles, Los Angeles World Airports, News Release: LAX Receives Airport Carbon Accreditation from Airports Council International, September 27, 2016. Available: https://www.lawa.org/newsContent.aspx?ID=2236, accessed on January 20, 2017.

added to by LAWA in the course of achieving the goals set for 2025, 2035, and 2050. Examples of such GHG reduction programs and improvements for LAWA owned and operated sources that are specifically mentioned in the application for the ACI certification include, but are not limited to, the following:

- **LAWA's Clean Fleet Program.** LAWA introduced alternative fuel technology to its fleet in 1993. LAWA currently operates the nation's largest alternative-fuel airport fleet consisting primarily of compressed natural gas (CNG), liquefied natural gas (LNG), propane, full-electric, and hybrid-electric vehicles. In the coming years, LAWA intends to replace its standard gasoline engine vehicles and some retired CNG vehicles with electric vehicles.[95] LAWA is also embarking on a campus-wide electric vehicle (EV) infrastructure study to support greater deployment of EV vehicles.
- **Solar Feasibility Study.** In 2015, LAWA launched a solar feasibility study for LAX to identify locations for the installation of photovoltaic solar energy at LAX to replace or supplement the use of purchased electricity. LAWA estimates that for every megawatt of solar installed at LAX, over 800 metric ton of CO_2 can be saved.[96]
- **Green Power Purchase.** LAWA has been purchasing green power from LADWP for several years. More specifically, LAWA voluntarily purchased 19.1 million kilowatt-hours (kWh) of green power in 2015, which equates to 10.4 percent of the total energy consumed at LAX.[97] As of February 8, 2017, and for several years prior, LAWA has made the "EPA Green Power Partnership, Top 30 Local Government" list.[98]
- **Lighting Retrofit Projects.** LAWA continues to replace lights and fixtures that serve terminals, streets, parking lots, and the airfield at LAX with a mix of energy efficient equipment.[99] This project will continue for several years.
- **Energy Efficiency Projects.** LAWA continues to upgrade air-handling equipment and perform regular maintenance to improve energy efficiency of air handling units. LAWA replaces old computers and related equipment with Energy Star certified office equipment.

[95] City of Los Angeles, Los Angeles World Airports, Los Angeles World Airports Sustainability Report 2015. Available: http://www.laxsustainability.org/documents/Sustainability_Report_2015.pdf, accessed August 25, 2016.

[96] City of Los Angeles, Los Angeles World Airports, Los Angeles World Airports Sustainability Report 2015. Available: http://www.laxsustainability.org/documents/Sustainability_Report_2015.pdf, accessed August 25, 2016.

[97] City of Los Angeles, Los Angeles World Airports, Los Angeles World Airports Sustainability Report 2015. Available: http://www.laxsustainability.org/documents/Sustainability_Report_2015.pdf, accessed August 25, 2016.

[98] U.S. Environmental Protection Agency, Green Power Partnership, Top 30 Local Government, as of February 8, 2017. Available: https://www.epa.gov/sites/production/files/2017-02/documents/top30localgov_feb2017.pdf.

[99] City of Los Angeles, Los Angeles World Airports, Los Angeles World Airports Sustainability Report 2015. Available: http://www.laxsustainability.org/documents/Sustainability_Report_2015.pdf, accessed August 25, 2016.

- **The Utility Monitoring Infrastructure Project (UMIP).** LAWA is in the midst of a program to add sub-meters for utilities across the LAX campus. One of the goals of the project is to allow LAWA to monitor energy usage at each of its facilities at the building level. Currently, LAWA is able to monitor electricity and natural gas consumption via the utility providers' invoices and meters, but these meters do not always correspond to a single structure.
- **Central Utility Plant.** LAWA recently replaced the Central Utility Plant (CUP) at LAX. The new CUP, which received LEED® Gold certification, is a state-of-the-art computerized facility that provides heating and cooling for the Central Terminal Area at LAX, and includes a co-generation system that simultaneously generates electrical power and steam. This process is anticipated to reduce fuel usage by at least 30 percent compared to separate electricity and heating processes. LAWA and LADWP estimated that the plant saved approximately 4,548,729 kWh of electricity in 2015,[100] with an associated reduction in GHG emissions.

In addition to the above, the continued implementation of LAWA's sustainability programs, including the LAWA Sustainability Plan and the sustainability provisions incorporated into the LAWA Design and Construction Handbook, such as LAWA's requirement that all building projects with an LADBS permit-valuation over $200,000 shall achieve Los Angeles Green Building Code Tier-1 conformance, will support LAWA's ability to achieve its carbon management goals.

In summary, LAWA's internal commitment to reduce GHG emissions from LAWA owned and operated sources will be implemented through a variety of programs and improvements through 2025, 2035, and 2050 including, but not limited to, those described above. The GHG reduction goals reflected in that commitment are not intended or designed to be applied on an individual project-by-project basis.

GHG Impacts

Local Plans, Policies, and Regulations

Implementation of the proposed project would not conflict with local plans, policies, or regulations adopted for the purposed of reducing GHG emissions, including Green LA, Climate LA, Executive Directive No. 10, the Sustainable City Plan, LAGBC, LAWA's Sustainability Plan, sustainability provisions contained in LAWA's Design and Construction Handbook, and LAWA's commitment to carbon management goals.

Green LA includes the goal for Los Angeles's airports to "green the airports" including the need for sustainability programs; LEED® green building rating standards in future construction; improvements in recycling; increased use of alternative fuel sources; increased use of recycled water; increase water conservation; reduced energy needs; reduced GHG emissions; and evaluation of options to reduce aircraft-related GHG emissions. Implementation of the proposed project would comply with LAWA's sustainability requirements and would be designed and constructed to meet LAGBC Tier 1. As such, the proposed project would be consistent with the airport-related goals of Green LA, by increasing energy efficiency in new construction, increasing

[100] City of Los Angeles, Los Angeles World Airports, Los Angeles World Airports Sustainability Report 2015. Available: http://www.laxsustainability.org/documents/Sustainability_Report_2015.pdf, accessed August 25, 2016.

recycling and water conservation, and reducing GHG emissions, in conjunction with LAWA's overall program for recycling, conservation, and GHG reductions.

Climate LA identifies goals to reduce CO_2 emissions 35 percent below 1990 levels by 2030 at LAX and the other LAWA airports, implement sustainability practices, and develop programs to reduce the generation of waste and pollutants. Actions are specified in the areas of aircraft operations, ground vehicles, electrical consumption, building construction, and other actions, such as implementing sustainability programs and using recycled water for landscape and other areas. Implementation of the proposed project would not affect aircraft operations or ground vehicles. As shown in Section VII.a, the energy efficiency of the new SAAP would be substantially better than that of SAAP 21. Building construction would feature the use of low-emitting paints, adhesives, and sealants, which is recognized as a GHG reduction action in the Climate LA plan, and LAWA's requirements for the use of low emission construction equipment (i.e., Tier 4 engines) would also serve to reduce GHG emissions. Implementation of the proposed project would comply with LAWA's sustainability requirements. Recycled water would be used for construction-related dust control and construction equipment washing when feasible; the proposed project would not include any landscaped areas that would require watering. As indicated above, LAWA has adopted an internal commitment to reduce GHG emissions from LAWA owned and operated sources below 1990 levels 45 percent by 2025, 60 percent by 2035, and 80 percent by 2050, which surpasses the GHG reduction goal set forth for LAX in Climate LA.

Executive Directive No. 10 requires City departments to create and adopt a statement of sustainable building policies. LAWA has a sustainability program, with which implementation of the proposed project would comply.

As noted above, the Sustainable City Plan (pLAn) framework related to the environment focuses on the following topic areas: local water, local solar, energy-efficient buildings, carbon and climate leadership, and waste and landfills. The proposed SAAP would generate very little water demand. The two restroom facilities would be equipped with low- or ultra-low-flow systems, which would be consistent with the pLAn goals relating to water conservation. In addition, recycled water would be used for construction-related dust control and equipment washing when feasible. The proposed project does not include solar energy; however, as indicated above, LAWA has initiated a solar feasibility study for LAX to identify locations for the installation of photovoltaic solar energy at LAX. The proposed SAAP would include limited building area, consisting of two guard booths. Consistent with pLAn initiatives pertaining to energy-efficient buildings, the guard booths would include energy efficient lighting fixtures and occupancy sensors to reduce energy consumption and control the HVAC system. The emphasis of pLAn relative to carbon and climate leadership is to reduce GHG emissions, improve GHG efficiency, and eliminate coal power as a source of electricity for the City and invest in green energy. With respect to reducing GHG emissions, as shown in Section VII.a, the proposed project would result in lower GHG emissions than the existing SAAP 21. With respect to coal-free electricity, while the proposed project has no control over that aspect of the plan, LAWA has been purchasing, and plans to continue to purchase, green energy for LAX, as noted above. With respect to waste and landfills, non-hazardous construction and demolition debris would be recycled or salvaged to achieve a 65 percent diversion in construction waste, as required to achieve LAGBC Tier 1 conformance.

With the construction practices and design features identified above, the proposed project would comply with the applicable requirements of the Los Angeles Green Building Code, LAWA's Sustainability Plan, and the LAWA's Design and Construction Handbook. Compliance

with these plans, policies, and regulations would be consistent with LAWA's commitment to reducing GHG emissions from LAWA owned and operated sources as part of its overall carbon management goals.

Based on the above analysis, the proposed project would not conflict with local plans, policies, and regulations adopted for the purposed of reducing GHG emissions.

State and Regional Plans, Policies, and Regulations

State and regional plans, policies, and regulations are generally aimed at setting statewide and regional policy, and are not directed at individual projects. Additionally, these plans and policies – including Executive Order S-3-05, Executive Order B-30-15, the AB 32 Scoping Plan, SB 32, and SCAG's 2016-2040 RTP/SCS – do not provide a specific basis for calculating what the proposed project's hypothetical "fair share" of statewide or regional emissions reductions might be. (See Center for Biological Diversity v. California Department of Fish and Wildlife [2015] 62 Cal.4th 205, 225-226.) It should also be noted that the Executive Orders referenced, including the GHG reduction trajectories, directly apply to State agencies and not to local agencies or the private sector. Similarly, the AB 32 Scoping Plan and SB 32, including the draft Scoping Plan for SB 32, are directed toward statewide programs, as identified through the California Air Resources Board, and do not directly limit GHG emissions from individual development projects. Statewide programs and initiatives directly implementing GHG reductions called for in AB 32 and SB 32 include, but are not limited to, the Renewable Portfolio Standard, the Low Carbon Fuel Standard, the Mobile Source Strategy, the Sustainable Freight Action Plan, the Short-Lived Climate Pollutant Reduction Strategy, SB 375 (which in Southern California is implemented by SCAG's RTP/SCS), the Cap-and-Trade Program, and the proposed Integrated Natural and Working Lands Action Plan.

Notwithstanding the above, it should be noted that, as shown in Section VII.a, the GHG emissions occurring from construction and operation of the proposed project would be much less than the SCAQMD threshold of significance, which is intended to achieve the level of GHG reductions set forth in Executive Order S-3-05 which, in turn, would achieve the GHG reduction goal of AB 32[101] (i.e., Executive Order S-3-05 includes the GHG reduction goal to reduce statewide GHG emissions to 1990 levels by 2020, which is the same goal as in AB 32). In addition, the SCAQMD threshold of significance was set to allow small projects to proceed without conflicting with the statewide EO S-3-05 2050 GHG reduction goal of 80 percent below 1990 levels.[102] As a result, GHG emissions from the proposed project would not conflict with statewide and regional plans and policies such as Assembly Bill 32, whose purpose is to reduce statewide emissions to 1990 levels by 2020; Executive Order S-3-05, whose 2050 goal is 80 percent below 1990 levels; Executive Order B-30-15 and SB 32, which call for interim reductions in statewide GHG emissions to 40 percent below 1990 levels by 2030; or the SCAG 2016-2040 RTP/SCS,

[101] South Coast Air Quality Management District, Board Meeting Date: December 5, 2008, Agenda No. 31: Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 5, 2008. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2.

[102] South Coast Air Quality Management District, Board Meeting Date: December 5, 2008, Agenda No. 31: Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 5, 2008. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2.

which outlines a vision for land use and transportation for the region that would achieve state GHG emissions reduction goals.

In summary, the proposed project would not conflict with state, regional and local plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs. Therefore, the potential impact would be less than significant and no further evaluation in the EIR 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. The proposed project would not result in any material changes in the use of hazardous materials at the project site. Construction and operation of the proposed new SAAP would involve some use of hazardous materials, including vehicle fuels, oils, transmission fluids, cleaning solvents, and architectural coatings, similar to those typically found at construction sites, as well at the existing SAAPs. These types of materials are not acutely hazardous, and storage, handling, and disposal of these materials are strictly regulated. Compliance with existing federal, state and local regulations and routine precautions would reduce the potential for accidental releases of a hazardous material to occur and would minimize the impact of an accident should one occur.

Inadvertent releases of hazardous materials on construction sites are typically localized and would be cleaned up in a timely manner. Further, proper containment, spill control, and disposal of hazardous waste associated with potential releases of hazardous substances during construction and operation would be addressed through compliance with regulations including the Emergency Planning and Community Right-to-Know Act (EPCRA), which provides requirements for emergency release notification, chemical inventory reporting, and toxic release inventories for facilities that handle chemicals; the Hazardous Material Release Response Plans and Inventory Law which requires the development of detailed hazardous materials inventories used and stored onsite, a program of employee training for hazardous materials release response, and the identification of emergency contacts and response procedures; and the California Hazardous Waste Control Law, which regulates the generation, transportation, treatment, storage, and disposal of hazardous waste.

Additionally, as discussed in Section IX below, the use of construction best management practices (BMPs) implemented as part of a Stormwater Pollution Prevention Plan (SWPPP) would minimize the potential adverse effects to the general public and environment. Temporary construction BMPs specified in LAWA's existing Construction SWPPP for LAX include, but are not limited to, the following: material transfer practices; waste management practices; roadway cleaning/tracking control practices; vehicle and equipment practices; and fueling practices.

Therefore, impacts associated with the routine use of hazardous materials would be less than significant.

Construction of the new SAAP would require the demolition and removal of the CAL GO Building. Materials of potential concern located throughout the CAL GO Building include, but are not limited to: ACM; LCS; mold; electrical transformers (possible PCB-containing oils); fluorescent light bulbs (possible mercury); fluorescent light ballasts (possible PCB-containing oils); high intensity light bulbs (possible mercury); thermostat switches (possible liquid mercury and/or batteries); emergency lighting and exit signs (possible lead acid or other metal containing batteries or tritium); and HVAC and refrigeration systems (possible chlorofluorocarbon (CFC) gas).[103]

In accordance with LAWA standard practices for development projects at LAX[104] and with City requirements that mandate compliance with California Health and Safety Code requirements,[105] prior to the issuance of any permit for the demolition or alteration of the CAL GO Building, LAWA would provide a letter to the Los Angeles Department of Building and Safety from a qualified asbestos abatement consultant indicating that no ACMs are present in the building.

Appropriate protective and materials management measures would be implemented during abatement and demolition of the CAL GO building in accordance with applicable federal, state, and local health and safety requirements. SCAQMD Rule 1403 specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of ACM. The rule's requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules; ACM handling and clean-up procedures; and storage, disposal, and landfilling requirements for asbestos-containing waste materials (ACWM). The federal Occupational Safety and Health Act (OSHA)[106] and California Occupational Safety and Health Act[107] regulations, specifically 8 CCR §1529 and 8 CCR §1532.1, would also apply to the abatement and disposal of hazardous building materials such as ACM and LCS. Compliance with these regulations would limit worker and environmental risks by requiring notification to employees who work in the vicinity of hazardous materials; controlling site access; requiring use of personal protective equipment; specifying demolition/renovation procedures, housekeeping controls, training and, in some cases, air monitoring and medical surveillance to reduce potential exposure; and requiring that materials be disposed of or recycled by licensed abatement contractors,. The California Occupational Safety and Health Act also requires preparation of an Injury and Illness Prevention Program (IIPP), which is an employee safety program of inspections, procedures to correct unsafe conditions, employee training, and occupational safety communication.

Additionally, construction work would be required to comply with LAWA's Design and Construction Handbook, which specifies that all requirements of environmental regulatory agencies be complied with, including but not limited to the federal and state Environmental Protection Agencies; the Certified Unified Program Agency (CUPA); the Air Quality Management

[103] Incorporated by Reference: Ninyo & Moore, Hazardous Building Material Survey, Continental Airlines General Office Building, Chelsea Kitchen Basement, and Training Buildings, Los Angeles International Airport, 7270, 7300, and 7320 World Way West, Los Angeles, California, May 18, 2016.

[104] City of Los Angeles, Los Angeles World Airports, Design and Construction Handbook: Construction, Closeout & Safety – LAWA Standards for the Construction Contract, July 2016.

[105] City of Los Angeles, Department of Building and Safety, Information Bulletin/Public - Building Code Document No. P/BC 2014-067, Asbestos Notification for Demolition/Alteration Permits, Effective January 1, 2014.

[106] 29 USC, Sections 651 et seq., Occupational Safety and Health Act.

[107] California Labor Code, Section 6300 et seq., California Occupational Safety and Health Act.

District (AQMD); and the local ordinances as cited in the City's Municipal Code. Those requirements include obtaining the proper permits for any construction, demolition, and/or remediation activities.[108]

In the event that contaminated soils are encountered during construction, testing would be conducted to determine appropriate abatement options. The soil would be excavated, treated or disposed of to the satisfaction of the applicable regulatory agencies, which could include the LAFD, the Los Angeles Regional Water Quality Control Board (LARWQCB), and/or the California Department of Toxic Substances Control (DTSC). As applicable, the City's contractor would be required to comply with SCAQMD Rule 1166 when excavating soil that contains VOCs.

Transport of ACMs, LCS, contaminated soils (if encountered and requiring disposal), or other hazardous materials off-site would be performed by licensed hazardous waste haulers. Disposal would comply with applicable local, state, and federal regulations governing disposal of hazardous materials, including transport by a licensed waste hauler and disposal at a properly certified facility; these regulations are designed to prevent hazardous waste transportation and disposal from causing significant hazards to the public and the environment.

Kettleman Hills Landfill, Buttonwillow, or another Class I landfill in the United States would be utilized for disposal of hazardous waste, based on facility and hazardous material requirements. ACMs are classified as non-hazardous waste and are not federally regulated (i.e., not regulated under the Resource Conservation Recovery Act [non-RCRA-Hazardous waste]); however, only certain facilities accept this type of waste, such as the Azusa Land Reclamation Management Facility. Construction debris contaminated with lead must be tested to determine proper disposal options. Depending on the concentration levels, it may be disposed as construction debris or may require disposal as a RCRA hazardous waste or non-RCRA hazardous waste.

Compliance with existing federal, state and local regulations and routine precautions would reduce the potential for hazards to the public or the environment through the routine disposal or accidental release of hazardous materials. Therefore, potential impacts would be less than significant.

In summary, construction and operation of the proposed project would not 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 potential impact would be less than significant with the implementation of the proposed project and no further evaluation in the EIR 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 Sections VIII.a-b above, the proposed project would not result in any material changes in the use of hazardous materials at the project site. Appropriate protective and materials management measures would be implemented during abatement and demolition of the CAL GO Building in accordance with applicable federal, state, and local health and safety

[108] City of Los Angeles, Los Angeles World Airports, Design and Construction Handbook: Planning – Permitting Agencies and the FAA, June 2016. Available: http://www.lawa.org/uploadedFiles/LAXDev/DCH/Planning/Permitting%20Agencies%20and%20the%20FAA_July%202016.pdf.

requirements presented in Sections VIII.a-b above. Moreover, there are no schools located or proposed within one-quarter mile of the project site. Therefore, no impacts 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 would occur with the implementation of the proposed project and no further evaluation in the EIR 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, would it create a significant hazard to the public or the environment?

Less Than Significant Impact. An Environmental Data Resources (EDR) regulatory database review, pursuant to Government Code Section 65962.5, was performed for the central area of LAX, which includes the proposed project site, in November 2015.[109] The database review was supplemented by recent information on sites with known contamination that have been identified by LAWA and by information available on the California State Water Resources Control Board Geotracker website.[110]

No known areas of hazardous waste contamination (soil and/or groundwater) are located within the proposed project site. Areas of known contamination that are in the vicinity of proposed project site consist of two locations at and adjacent to the United (formerly Continental Airlines) Maintenance Facility identified by the LARWQCB as "Jet Fuel Plume Area" and "Area of Concern 3 (AOC-3)."[111] The Jet Fuel Plume Area encompasses approximately 19 acres located to the southwest of the United (formerly Continental Airlines) Maintenance Facility hangars, east of Taxiway AA, and north of and beneath a portion of Taxiway C. The eastern boundary of the Jet Fuel Plume Area is located approximately 1,100 feet southwest of the proposed project site. The jet fuel release was reported in 1994 and the leaking jet fuel hydrant lines were decommissioned and replaced beginning in 1995. An interim jet fuel recovery system operated from 1994 through 2005, and a full-scale system was started in 2005 that included 221 free product recovery wells. A total of 950,000 gallons of jet fuel had been removed as of June 2015. Data indicate that the boundaries of the plume are stable. Current work at the plume location includes the continued operation of the jet fuel recovery system, pilot testing of enhanced recovery techniques, and semi-annual gauging and sampling of select wells as part of an area-wide monitoring program. The LARWQCB is currently reviewing a Jet Fuel Operation & Maintenance Remedial Action Plan that will govern the continued operation of the recovery system and provide a long-term stability monitoring plan for the plume.[112] AOC-3, located approximately 600 feet southwest of the proposed project site, has soil and groundwater contamination resulting from a release of a former underground jet fuel storage tank. From 1988 to 2013, a number of soil and groundwater

[109] Environmental Data Resources Inc., EDR Data Map Area Study, Central LAX, Los Angeles, California, November 24, 2015.

[110] California State Water Resources Control Board, Geotracker website. Available: http://geotracker.waterboards.ca.gov/, accessed May 31, 2016.

[111] California Water Boards, Los Angeles Regional Water Quality Control Board Fact Sheet, Former Continental Airlines Maintenance Facility at the Los Angeles International Airport, Soil and Groundwater Investigation and Cleanup, Jet Fuel Plume and AOC-3 Areas, January 2016. Available: http://geotracker.waterboards.ca.gov/regulators/deliverable_documents/4682859659/FACT%20SHEET16.pdf.

[112] California Water Boards, Los Angeles Regional Water Quality Control Board Fact Sheet, Former Continental Airlines Maintenance Facility at the Los Angeles International Airport, Soil and Groundwater Investigation and Cleanup, Jet Fuel Plume and AOC-3 Areas, January 2016. Available: http://geotracker.waterboards.ca.gov/regulators/deliverable_documents/4682859659/FACT%20SHEET16.pdf.

investigations were performed at AOC-3, including the installation and sampling of approximately 50 soil borings and three groundwater monitoring wells. Current activities at AOC-3 include semi-annual gauging and sampling of groundwater wells as part of an area-wide monitoring program.[113] Due to the distance of the Jet Fuel Plume Area and AOC-3 from the proposed project site, and given that construction of the proposed project is not expected to involve dewatering, contamination from the former Continental Airlines Maintenance Facility Jet Fuel Plume Area and AOC-3 would be unlikely to be encountered during construction of the proposed project.

The proposed project is not 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, it would not create a significant hazard to the public or the environment related to such hazardous materials sites, and no further evaluation in the EIR 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, would 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[114] 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. Section 12.50 of the Comprehensive Zoning Plan of the City of Los Angeles regulates building height limits and land uses within the Hazard Area 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.

Construction activities would be coordinated with FAA through the use of Form FAA 7460-1 (Notice of Proposed Construction or Alteration), which requires that any potential hazards to air navigation be addressed. All construction activities would comply with applicable aviation-related safeguards, and thus would not create a safety hazard. Therefore, potential impacts to safety for people working or residing in the project area would be less than significant with the implementation of the proposed project and no further evaluation in the EIR is required.

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

No Impact. The project site is not located within the vicinity of a private airstrip but rather within a public airport. See Section VIII.e above. Therefore, implementation of the proposed project would not result in a safety hazard for people residing or working within the vicinity of a

[113] California Water Boards, Los Angeles Regional Water Quality Control Board Fact Sheet, Former Continental Airlines Maintenance Facility at the Los Angeles International Airport, Soil and Groundwater Investigation and Cleanup, Jet Fuel Plume and AOC-3 Areas, January 2016. Available: http://geotracker.waterboards.ca.gov/regulators/deliverable_documents/4682859659/FACT%20SHEET16.pdf.

[114] U.S. Department of Transportation, Federal Aviation Administration, FAA Advisory Circular (AC) 150/5300-13A, Airport Design, February 26, 2014. Available: http://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentNumber/150_5300-13/.

private airstrip. No impact would occur with the implementation of the proposed project and no further evaluation in the EIR 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 plans and emergency evacuation plans to minimize the potential for and the effects of an accident, should one occur. Construction activities at the proposed project site and staging area would 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. LAWA's Design and Construction Handbook specifies that a Logistic Plan and fully documented Logistical Work Plan Checklist be developed for construction projects. Required information includes, but is not limited to, identification of emergency access provisions, emergency evacuation routes, and 24-hour emergency contact information.[115] Further, LAWA would coordinate with the LAFD and LAWAPD regarding emergency access and other design needs to ensure that emergency service levels are maintained during construction. As discussed in Sections XVI.d-e, no lane or road closures of public roadways would be required for construction. Construction of the new SAAP would eliminate the current landside access route to Fire Station 80/ARFF; however, access to Fire Station 80/ARFF would be maintained by providing an access road along the south side of the new SAAP. As proposed, the entrance to this new access road would be located off of World Way West, adjacent to the proposed SAAP access point. The LAWA CALM Team would ensure that occupancy and operation of adjacent and surrounding facilities, including Fire Station 80/ARFF, would be maintained throughout demolition and construction activities. In addition, in accordance with standard LAWA practices, all emergency access routes in the vicinity of the project site would be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations;[116] therefore, construction of the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plans. In addition, LAWA would submit a Notice of Proposed Construction or Alteration to FAA in advance of construction as required by 14 CFR §77.9, to ensure that the proposed project would not represent an obstruction to airport operations.

With regards to operations, the proposed SAAP would include an independent emergency lane to provide dedicated access for emergency vehicles. This lane would allow vehicles in process in the SAAP to remain in their positions while emergency vehicles are allowed to pass. This would improve response times for emergency vehicles access the AOA.

[115] City of Los Angeles, Los Angeles World Airports, Design and Construction Handbook: Coordination and Logistics Management (CALM) – CALM Review Procedures, July 2016. Available: http://www.lawa.org/uploadedFiles/LAXDev/DCH/Construction/CALM%20Review%20Procedures%20TIAP%20Process%20July%202016.pdf.

[116] U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular (AC) 150/5300-13A, Airport Design, February 26, 2014. Available: http://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentNumber/150_5300-13.; U.S. Department of Transportation, Federal Aviation Administration, Federal Aviation Regulations (FAR) Sections 139.315-139.319 – Air Rescue and Firefighting (ARFF); 24 California Code of Regulations, Part 9 – California Fire Code, Chapter 9 (Fire Protection Systems) and Chapter 10 (Means and Egress); and City of Los Angeles, Los Angeles Municipal Code, Chapter V, Article 7 – Fire Protection and Prevention (Fire Code).

Therefore, potential construction-related impacts related to emergency response plans or emergency evacuation plans would be less than significant with the implementation of the proposed project and no further evaluation in the EIR 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 is located within a developed airport and surrounded by airport uses, urbanized areas, and the Los Angeles/El Segundo Dunes. There are no fire hazard areas containing flammable brush or grass 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.[117] Therefore, implementation of the proposed project would not result in the exposure of people or structures to hazards associated with wildland fires and no further evaluation in the EIR 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 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. As part of the storm water program associated with the NPDES Phase 1 Permit, LARWQCB adopted the Standard Urban Storm Water Mitigation Plan (SUSMP) to address storm water pollution from new development and redevelopment projects. A recent change to the permit puts primary emphasis on Low Impact Development (LID) practices over treatment control BMPs. The Stormwater LID Ordinance approved by the City of Los Angeles outlines requirements for providing LID strategies for new development and redevelopment projects.[118]

Implementation of the proposed project would not result in a material increase in impervious surfaces at the project site, as the site is currently developed and predominantly paved, with the only exception being small areas of ornamental landscaping. However, construction would result in site disturbance associated with site excavation and grading and pavement removal. These construction activities would require preparation of a Storm Water Pollution Prevention Plan (SWPPP) to address construction-related surface water quality impacts and delineate water quality control measures (i.e., Best Management Practices or BMPs) and/or LID practices to address those impacts. Temporary construction BMPs specified in LAWA's existing Construction SWPPP for LAX include, but are not limited to, the following: soil stabilization (erosion control) techniques; sediment control methods; contractor training programs; material transfer practices; waste management practices; roadway cleaning/tracking control practices; vehicle and equipment practices; and fueling practices.

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

[118] City of Los Angeles, Ordinance No. 181,899, Low Impact Development (LID) Strategies, October 7, 2011. Available: http://www.lastormwater.org/wp-content/files_mf/finallidordinance181899.pdf.

As noted above, construction of the proposed project would occur on a site that is currently developed and predominantly paved, with the only exception being small areas of ornamental landscaping. The proposed project and associated facilities would not materially alter existing drainage patterns or surface water runoff quantities on the project site and would not violate any water quality standards or waste discharge requirements. Therefore, impacts related to water quality would be less than significant with the implementation of the proposed project and no further evaluation in the EIR is required.

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

No Impact. The project site is located within the West Coast Groundwater Basin. Groundwater beneath the project site is not used for municipal or agricultural purposes. As described under Section VI.a.iii above, the groundwater beneath the site is on the order of 40 to 95 feet below the surface. Excavation associated with project construction would extend to a maximum depth of 5 to 8 feet. Given the depth of groundwater, construction of the proposed project is not expected to involve dewatering and, thus, would not deplete groundwater supplies. Moreover, operation of the proposed SAAP would not rely on groundwater supplies nor would the proposed project result in a material increase in the amount of impervious surface on the project site. Therefore, no impacts to groundwater supplies or groundwater recharge would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

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

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

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

f. Otherwise substantially degrade water quality?

c-f. Less Than Significant Impact. As noted in Section IX.a above, the proposed project would be constructed on a site that is currently impervious, with the only exception being small areas of ornamental landscaping. Implementation of the proposed project would not alter drainage patterns in a manner that would result in erosion or siltation offsite or increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite. Moreover, with implementation of a SWPPP and compliance with regulatory requirements, the project would not substantially degrade water quality. Therefore, these potential impacts to water quality would be less than significant with the implementation of the proposed project and no further evaluation in the EIR is required.

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

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

g-h. No Impact. No 100-year flood hazard areas are located within LAX.[119,120] 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 flood hazard area would occur with the implementation of the proposed project and no further evaluation in the EIR 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 Sections IX.g-h above. In addition, as delineated on the City of Los Angeles Inundation and Tsunami Hazard Areas map,[121] the project site is not within a boundary of an inundation area from a flood control basin, nor is it 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 would occur with the implementation of the proposed project, and no further evaluation in the EIR is required.

j. Inundation by seiche, tsunami, or mudflow?

No Impact. The project site is approximately 1.4 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.[122] 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 would occur with the implementation of the proposed project and no further evaluation in the EIR 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 development of the project site within the airport would not disrupt or divide the physical arrangement of an established community. Therefore, no impacts resulting from physically dividing an established community would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

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[119] City of Los Angeles, Department of City Planning, Safety Element of the City of Los Angeles General Plan, Exhibit F, 100-Year & 500-Year Flood Plains in the City of Los Angeles, March 1994.

[120] U.S. Department of Homeland Security, Federal Emergency Management Agency, Letter of Map Revision Based on Fill 218-65-R, Map Panel Affected: 0601370089 D, September 6, 2002.

[121] City of Los Angeles, Department of City Planning, Safety Element of the City of Los Angeles General Plan, Exhibit G, Inundation & Tsunami Hazard Areas in the City of Los Angeles, March 1994.

[122] City of Los Angeles, Department of City Planning, Safety Element of the City of Los Angeles General Plan, Exhibit G, Inundation & Tsunami Hazard Areas in the City of Los Angeles, March 1994.

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, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The existing zoning for the site is LAX-A Zone. Land use designations and development regulations applicable to LAX are set forth in the LAX Plan[123] and LAX Specific Plan,[124] both approved by the Los Angeles City Council in December 2004 and subsequently amended. 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 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:

- Surface and structured parking lots (including those at-grade, above-grade, and subterranean)
- Airline maintenance and support, including, but not limited to, storage, aircraft engine or airframe repair and testing, and aircraft maintenance shops
- Runways, taxiways, aircraft parking aprons, and service roads
- Aircraft rescue, fire fighting and training facilities
- Fuel farm
- Security-related equipment and facilities
- Uses customarily incident to any of the above uses, and accessory buildings or uses

The proposed project represents near-term improvements that would enhance the efficient operation on the west side of LAX. The proposed project would provide a fully functional and all-encompassing access point onto the AOA on the west side of LAX. A new SAAP is needed on the west side to replace SAAP 5 which was displaced by the MSC North Project, and SAAP 21 which will be removed in May 2017 to enable the full build-out of WAMA. The proposed project improvements are consistent with the LAX Plan land use designation and with the allowable uses under the LAX Specific Plan, which are presented above. In particular, the proposed project would provide new security-related equipment and facilities. Therefore, the proposed project would not conflict with the 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. Moreover, implementation of the proposed project would be consistent with the LAX Specific Plan permitted uses. No conflict with an applicable land use plan, policy or regulation would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

[123] City of Los Angeles, Department of City Planning, LAX Plan, adopted December 14, 2004, last amended May 24, 2013. Available: http://planning.lacity.org/complan/specplan/pdf/LAXPLAN_AMENDED20130524_FINAL(SECURED).pdf.

[124] City of Los Angeles, Department of City Planning, Los Angeles International Airport (LAX) Specific Plan, adopted December 14, 2004, last amended June 14, 2016. Available: http://clkrep.lacity.org/onlinedocs/2013/13-0285-s3_ORD_184348_6-15-16.pdf.

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 0.9 mile to the west of the project site, opposite Pershing Drive. The proposed project would be located within an urbanized airport area within and adjacent to existing airport uses and would 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 or construction staging area. Therefore, no impacts to, or conflict with, any habitat or natural community conservation plans would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

XI. MINERAL RESOURCES. *Would the project:*

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

No Impact. The project site is within the boundaries of the airport and surrounded by airport-related uses. There are no mineral resources on the project site,[125] nor is the site available for mineral resource extraction given the existing airport use. Therefore, no impacts related to the loss of availability of a known valued mineral resources would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

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 Mineral Resources map in the City of Los Angeles General Plan Conservation Element[126] or the City of Los Angeles Oil Field & Oil Drilling Areas map in the City of Los Angeles General Plan Safety Element.[127] 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 impacts related to the availability of a locally-important mineral resource recovery site would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

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

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

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

[125] City of Los Angeles, Department of City Planning, Conservation Element of the City of Los Angeles General Plan, Exhibit A, Mineral Resources, January 2001.

[126] City of Los Angeles, Department of City Planning, Conservation Element of the City of Los Angeles General Plan, Exhibit A, Mineral Resources, January 2001.

[127] City of Los Angeles, Department of City Planning, 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.

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 the construction of a new fully functional SAAP on the west side of LAX. Construction of the new SAAP would require the demolition and removal of the former CAL GO Building, which is vacant. The project site is within a public airport in an urban environment that operates 24 hours a day, seven days a week, and 365 days a year, with many existing sources of noise, including aviation noise and traffic noise.

In general, humans find a change in sound level of 3 dB is just noticeable. Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If a sound's physical intensity is doubled, the sound level increases by 3 dB, regardless of the initial sound level. For example, 60 dB plus 60 dB equals 63 dB, 80 dB plus 80 dB equals 83 dB. However, where ambient noise levels are high in comparison to a new noise source, there will be a small change in noise levels. For example, 70 dB ambient noise levels are combined with a 60 dB noise source the resulting noise level equals 70.4 dB.

Construction Noise

Construction Equipment Noise

In accordance with the L.A. CEQA Thresholds Guide, construction activities are considered to have a significant impact relative to construction noise if construction activities lasting more than ten days in a three-month period would exceed baseline ambient exterior noise levels by 5 dBA or more at a noise-sensitive use.[128]

Construction of the proposed project, which would involve the use of various pieces of equipment, would result in a temporary increase in ambient noise levels immediately adjacent to the project site. Noise levels from outdoor construction activities, independent of background ambient noise levels, indicate that the noisiest phases of construction are typically during excavation and grading, and that noise levels from equipment with mufflers are typically 86 A-weighted decibels (dBA) in equivalent A-weighted sound level (L_{eq}) at 50 feet from the noise source. [129] This type of sound typically dissipates at a rate of 4.5 dBA to 6.0 dBA for each doubling of distance.[130] For the noise analysis of the proposed project, the more conservative attenuation rate of 4.5 dBA was used. As such, a sound level of 86 dBA at 50 feet from the noise source would be approximately 81.5 dBA at a distance of 100 feet, 77 dBA at a distance of 200 feet, and so on. That sound drop-off rate does not take into account any intervening shielding or barriers such as structures or hills between the noise source and noise receptor.

[128] City of Los Angeles, L.A. CEQA Thresholds Guide, Your Resource for Preparing CEQA Analyses in Los Angeles, 2006.

[129] City of Los Angeles, L.A. CEQA Thresholds Guide, Your Resource for Preparing CEQA Analyses in Los Angeles, 2006.

[130] U.S. Department of Transportation, Federal Highway Administration, Highway Traffic Noise: Analysis and Abatement Guidance, FWWA-HEP-10-025, December 2011. Available: https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf.

Construction of the proposed project would occur in an area generally removed from the communities near LAX. The nearest noise-sensitive land use is residential development approximately 3,800 feet to the south in El Segundo. Based on a noise attenuation rate of 4.5 dBA per doubling of distance (not including noise attenuation associated with intervening walls, structures, and topography which can result in up to approximately 10 to 20 dBA reduction, depending on the nature and height of the intervening barrier between noise source and receptor), the noise levels from construction activities within the project site would be approximately 58 dBA L_{eq} at the closest residences in El Segundo. The existing daytime ambient noise level at the nearest sensitive receptor (i.e., residential development in El Segundo south of Imperial Avenue) is approximately 71.4 dBA L_{eq} or higher,[131] with the nighttime ambient noise level being approximately 5 dBA lower.

As noted above, construction activities are considered to have a significant impact relative to construction noise if construction activities lasting more than ten days in a three-month period would exceed baseline ambient exterior noise levels by 5 dBA or more at a noise-sensitive use.[132] The noise level from construction activity within the project site (58 dBA L_{eq} at residential development in El Segundo) would not exceed the existing daytime or nighttime ambient noise level at the noise-sensitive use and, in fact, would be lower than existing ambient noise levels. Therefore, noise from construction equipment would not expose persons to, or generate, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Moreover, construction equipment associated with the proposed project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Potential impacts associated with construction equipment noise would therefore be less than significant.

Construction Roadway 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 B or better) would have to increase at more than a three-fold rate to reach the City's threshold of significance of a 5 dBA increase, and would need to increase even more on roads with poor operating conditions (i.e., Level of Service C or worse).[133] Roadways in the project area are heavily traveled. Project-related construction activities would not approach the number of trips required to result in a three-fold increase on any area roads (see Transportation/Traffic section for estimated number of proposed

[131] Incorporated by reference: City of Los Angeles, Los Angeles World Airports, Final Environmental Impact Report for Los Angeles International Airport (LAX) Specific Plan Amendment Study, Appendix J2, Road Traffic Noise, Attachment 2, page 1 of 4 for L_{eq} measurement representative of residential areas in El Segundo south of Imperial Highway (Receptor ID RD15), January 2013. Available: http://www.lawa.org/uploadedfiles/spas/pdf/SPAS%20DRAFT%20EIR/LAX%20SPAS%20DEIR%20App%20J2%20Road%20Traffic%20Noise%20Final.pdf.

[132] City of Los Angeles, L.A. CEQA Thresholds Guide, Your Resource for Preparing CEQA Analyses in Los Angeles, 2006.

[133] Increases in sound pressure levels (i.e., noise) increase logarithmically. The sound pressure level from two equal sources is 3 dB greater than the sound pressure level of just one source. (Source: U.S. Department of Transportation, Highway Traffic Noise Homepage: Highway Traffic Noise Analysis and Abatement Policy and Guidance, updated July 18, 2011. Available: https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/polguide/polguide02.cfm, accessed February 20, 2017.). This would also be true relative to a doubling of traffic volumes, expressed logarithmically as $10 \text{ Log} \frac{2}{1} = 3$ dB. As such, a tripling of traffic volumes would equate to $10 \text{ Log} \frac{3}{1} = 4.77$ dB.

project trips). Therefore, construction-related roadway would not expose persons to, or generate, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Moreover, construction-related roadway noise associated with the proposed project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Potential impacts associated with construction roadway noise would be less than significant.

Construction Equipment Vibration

Major construction within 200 feet and pile driving within 600 feet may result in potentially disruptive vibration to sensitive receptors.[134] Vibration-sensitive receptors are similar to noise-sensitive receptors and include residences, schools, hospitals, libraries, recreational areas, fragile or historic buildings, and buildings such as computer chip manufacturers, radio and TV stations, and recording studios. As noted above, the project site is located in a busy international airport. Facilities adjacent to the project site include the LAX Fuel Farm and LAWA administrative offices/vehicle parking to the north and northwest, respectively; a RON aircraft parking area to the east; the AA OSF, AA Engineering Building, and United Airlines Maintenance Hangars, and Los Angeles Fire Department (LAFD) Fire Station 80/Aircraft Rescue and Fire Fighting Facility (ARFF) to the south; and the former CAL Training Building (vacant) to the west. The nearest vibration-sensitive use is the CAL Training Building, which is an historic building located approximately 55 feet from the closest point of construction.

Bulldozers, vibratory rollers, loaded trucks, and jackhammers are examples of the types of equipment that could be used during project construction and result in vibration impacts to nearby uses. Vibration levels are estimated using peak particle velocity (ppv), which is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in inches per second (in/sec). Vibration levels for the types of equipment noted above were estimated using peak ppv levels in in/sec published by Caltrans.[135] The threshold of significance relative to the potential for vibration-related structural damage to occur at an historic building is considered to be 0.5 ppv in/sec.[136]

Table 9 summarizes the estimated vibration levels of various types of construction equipment at a distance of 55 feet, which represents the closest distance between the project site and the CAL Training Building.

[134] California Department of Transportation, Transportation and Construction Vibration Guidance Manual, September 2013. Available: http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf.
[135] California Department of Transportation, Transportation and Construction Vibration Guidance Manual, Table 14, September 2013. Available: http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf.
[136] California Department of Transportation, Transportation and Construction Vibration Guidance Manual, Table 14, September 2013. Available: http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf.

Table 9 Vibration Levels During Construction	
Equipment	**ppv at 55 feet (in/sec)**
Vibratory roller	0.064
Large bulldozer	0.027
Loaded trucks	0.023
Jackhammer	0.011
Small bulldozer	0.001

Notes:
ppv = peak particle velocity
in/sec = inch(es) per second
Source: CDM Smith 2017.

As indicated in Table 9, the highest construction-related vibration level at a distance of 55 feet would be 0.064 ppv in/sec, which is well below the threshold of significance of 0.5 ppv in/sec. As demonstrated by the calculations in Table 9, the proposed project would not expose persons to, or generate, excessive groundborne vibration. Therefore, impacts associated with groundborne vibration or groundborne noise would be less than significant and no further evaluation in the EIR is required.

Operational Noise

As indicated previously, implementation of the proposed project would not result in an increase in activity within LAX, or an increase in aircraft operations. Therefore, operation of the proposed project would not generate any additional noise, nor would it increase 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. Further, noise associated with automobile traffic during airport operations would not change with implementation of the proposed project. The project site is well removed from noise-sensitive uses and the nature of the proposed activities, being similar to other such activities occurring throughout the airport, would not change. Therefore, impacts associated with operational noise would be less than significant and no further evaluation in the EIR is required.

Summary of Impacts

Construction and operation of the proposed project would not expose persons to, or result in the generation of, noise in levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies; expose people to, or result in the 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. Therefore, potential impacts related to construction and operational noise would be less than significant and no further evaluation in the EIR 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, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. Implementation of the proposed project involves the construction of a new fully functional SAAP on the west side of LAX. As described above, there would be a temporary increase in ambient noise levels during construction of the proposed project; however, the potential impacts associated with that increase would be less than significant. As also discussed above, implementation of the proposed project would not result in an increase in activity within LAX, or an increase in aircraft operations; hence, it would not result in significant noise impacts related to operational noise in areas near the airport. Based on the above, implementation of the proposed project would not expose people residing or working in the project area to excessive noise from a project located within an airport land use plan and no further evaluation in the EIR is required.

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

No Impact. The project site is within a public airport and not located within the vicinity of a private airstrip. Therefore, no impact would occur relative to the exposure of people residing or working in the project area to excessive noise levels from a private airstrip with the implementation of the proposed project and no further evaluation in the EIR 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 project would provide a new SAAP on the west side of LAX and would be the sole full-access SAAP on World Way West after the existing SAAP 21 is taken out of service in May 2017. The proposed project does not include residential or business development. The employees that would work at the new SAAP would be existing airport security employees that would move from SAAP 21 when it is taken out of service. The project site is located within a developed airport; no new roads or extensions of existing roads serving new development, or other growth-accommodating infrastructure, are proposed. Therefore, the implementation of the proposed project would not directly or indirectly induce substantial population growth directly or indirectly and no further evaluation in the EIR 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 would not displace housing. Therefore, no impacts on housing would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

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

a. Fire protection?

Less Than Significant Impact. The LAFD provides fire protection services to the project site. Four LAFD fire stations are located on airport property (Fire Station Nos. 80, 51, 5, and 95). Fire Station No. 80/ARFF, located at 7250 World Way West, is approximately 250 feet south of the project site; Fire Station No. 51, located at 10435 South Sepulveda Boulevard, is approximately 1.2 miles east of the project site; Fire Station No. 5, located at 8900 Emerson Avenue, is approximately 1.3 miles northeast of the project site; and Fire Station No. 95, located at 10010 International Road, is approximately 2.1 miles east of the project site. Construction of the new SAAP would eliminate the current landside access route to Fire Station 80/ARFF; however, access to Fire Station 80/ARFF would be maintained by providing an access road along the south side of the new SAAP. As proposed, the entrance to this new access road would be located off of World Way West, adjacent to the proposed SAAP access point. The LAWA Construction and Logistics Management (CALM) Team would ensure that occupancy and operation of adjacent and surrounding facilities, including Fire Station 80/ARFF, would be maintained throughout demolition and construction activities. In addition, the proposed SAAP would include an independent emergency lane to provide dedicated access for emergency vehicles. This lane would allow vehicles in process in the SAAP to remain in their positions while emergency vehicles are allowed to pass. This would improve response times for fire protection vehicles that access the AOA.

Fire service requirements are generally based on the size of the building and relationships to other structures and property lines. The proposed project would provide a new SAAP on the west side of LAX and would be the sole full-access SAAP on World Way West after the existing SAAP 21 is taken out of service in May 2017. The project site is currently developed and used for airport uses, and the boundary of the proposed project would not extend beyond the current airport boundary. The proposed project would comply with all applicable city, state, and federal codes and ordinances, including LAFD and Los Angeles Building and Safety requirements.[137] Implementation of the proposed project would not result in an increase in demand for fire protection services leading to the need for new or altered fire protection facilities, the construction of which could lead to a substantial adverse physical impact. In addition, the proposed SAAP would include an independent emergency lane to provide dedicated access for emergency vehicles. This lane would allow vehicles in process in the SAAP to remain in their positions while emergency vehicles are allowed to pass. This would improve response times for fire protection vehicles that access the AOA. Therefore, potential impacts to fire protection services with the

[137] Including, but not limited to: U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular (AC) 150/5300-13A, Airport Design, February 26, 2014. Available: http://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentNumber/150_5300-13.; U.S. Department of Transportation, Federal Aviation Administration, Federal Aviation Regulations (FAR) Sections 139.315-139.319, Air Rescue and Firefighting (ARFF); 24 California Code of Regulations, Part 9 – California Fire Code, Chapter 9 (Fire Protection Systems) and Chapter 10 (Means and Egress); and City of Los Angeles, Los Angeles Municipal Code, Chapter V, Article 7 – Fire Protection and Prevention (Fire Code).

implementation of the proposed project would be less than significant and no further evaluation in the EIR is required.

b. Police protection?

Less Than Significant 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 north of Park One, approximately 1.3 miles east of the project site, and the LAPD LAX Detail station is located within the CTA, approximately 1.2 miles east of the project site. Demand for on-airport police protection services is typically determined by increases in passenger activity and employees. The main purpose of the proposed project is to provide a fully functional and all-encompassing access point onto the AOA on the west side of LAX. A new SAAP is needed on the west side to replace SAAP 5, which was displaced by the MSC North Project, and SAAP 21 which will be removed in May 2017 to enable the full build-out of WAMA. The proposed project would not increase passenger capacity or long-term employment at LAX that would result in need for additional police protection. In addition, the proposed SAAP would include an independent emergency lane to provide dedicated access for emergency vehicles. This lane would allow vehicles in process in the SAAP to remain in their positions while emergency vehicles are allowed to pass. This would improve response times for police vehicles that access the AOA. Therefore, the proposed project would not result in impacts to police protection that would require the construction of new facilities or the expansion of existing facilities. Potential impacts would be less than significant and no further evaluation in the EIR is required.

c. Schools?

No Impact. The proposed project would provide a new SAAP on the west side of LAX and would be the sole full-access SAAP on World Way West after the existing SAAP 21 is taken out of service in May 2017. The proposed project would not include residential development and would not increase passenger capacity or long-term employment at LAX such that indirect growth would result in enrollment increases that would adversely impact schools. Therefore, no impacts to existing school facilities or need for new school facilities would result from the implementation of the proposed project and no further evaluation in the EIR is required.

d. Parks?

No Impact. The proposed project would provide a new SAAP on the west side of LAX and would be the sole full-access SAAP on World Way West after the existing SAAP 21 is taken out of service in May 2017. The proposed project would not include residential development and would not increase passenger capacity or long-term employment such that indirect growth would result in increased demand for neighborhood or regional parks. Therefore, no impacts to existing parks or need for new parks would result from implementation of the proposed project and no further evaluation in the EIR is required.

e. Other public facilities?

No Impact. Implementation of the proposed project would have no adverse impacts on other public facilities. The proposed project would provide a new SAAP on the west side of LAX and would be the sole full-access SAAP on World Way West after the existing SAAP 21 is taken out of service in May 2017. The proposed project does not include residential development, and thus would not contribute to a direct increase in demand for other public facilities (e.g., libraries).

Also, the proposed project would not result in increases in passenger capacity at the airport or result in an increase in airport employment. Therefore, the proposed project would not induce substantial population growth in the area or indirectly result in a demand for other public facilities. Therefore, no impacts to, or need for, new public facilities would occur from implementation of the proposed project and no further evaluation in the EIR 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 would occur or be accelerated?

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

a-b. No Impact. The proposed project does not include development of recreational facilities nor does it include residential development. The proposed project would not increase passenger capacity or long-term employment at LAX such that increased demand for neighborhood and regional parks or other recreational facilities would occur. Therefore, the proposed project would not result in substantial physical deterioration of existing area recreational facilities or require the construction or expansion of recreational facilities. As such, no impacts related to recreational facilities would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

XVI. TRANSPORTATION/TRAFFIC. *Would the project:*

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

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

a-b. Less Than Significant Impact.

Construction Traffic Impacts

Traffic Generation

Implementation of the proposed project would result in temporary construction-related traffic generation. Construction-related vehicle trips would include worker commute trips, truck delivery and haul trips, and miscellaneous trips. The typical number of daily trips would vary by construction phase. The project includes the demolition of one building—the CAL GO Building—and the construction of a new SAAP in the same location. The main phases of project construction include demolition, site preparation/grading, construction/underground utilities, paving, and coating.

For past LAWA projects, LADOT has indicated that no traffic study is required to assess the temporary impacts of a project from construction activity.[138] Therefore, no traffic study was conducted for the proposed project. The analysis of construction traffic impacts provided below is based on LAWA's knowledge of construction-related traffic impacts associated with other construction projects at LAX, in the context of the construction activities that would be required for the proposed project.

The number of construction workers would vary by construction phase. The peak number of construction worker trips and the peak number of truck trips would occur during different phases. However, in order to provide a conservative estimate, the peak number of construction worker trips and the peak number of truck trips were combined. The peak number of construction workers commuting to and from the project site is estimated to be approximately 40 per day. Based on a vehicle occupancy factor of 1.15 workers per vehicle, this would result in approximately 35 roundtrip vehicle trips per day. Worker parking would be provided at or adjacent to the project site within the western portion of the airport; hence, no shuttling of workers between the work area and the parking area would be needed. Deliveries and other truck-related activity to the site would be highest during the site preparation/grading phase, when they are estimated to reach 15 trucks per day. For the purpose of evaluating traffic impacts, truck trips can be converted to "passenger car equivalents" (PCEs) to account for the additional impact that large vehicles would have on roadway traffic operations. If a PCE factor of 2.5[139] was applied to the truck trips, which is consistent with the assumptions in previous LAX construction projects, the number of truck trips described above would equate to approximately 38 roundtrip PCEs per day during site preparation/grading. The combination of the peak number of construction worker trips and the peak number of truck trips would be approximately 73 vehicle round trips (146 one-way trips), including construction worker commute trips and construction truck trips as adjusted with the PCE factor.

In the interest of avoiding traffic impacts during the typical morning and afternoon peak commute periods, which are defined as 7:00 a.m. to 9:00 a.m. and 4:30 p.m. to 6:30 p.m., respectively, construction activities associated with the proposed project are planned to occur between 6:00 a.m. and 3:30 p.m. These work hours would be written into the construction specifications. As such, construction workers would commute to, and arrive at, the project site before the typical morning peak commute period and would leave, and commute from, the site before the typical afternoon peak commute period. Additionally, as further described below, construction-related truck delivery trips would primarily occur outside the aforementioned morning and afternoon peak commute periods.

Affected Circulation System

The project site is located in the western portion of LAX and access to the site, for workers, deliveries, and miscellaneous trips, would be via World Way West immediately off of Pershing Drive. Access to Pershing Drive adjacent to LAX would be provided from the south via Imperial

[138] Ayala, Pedro, City of Los Angeles, Department of Transportation, Electronic Mail Message to Patrick Tomcheck, Los Angeles World Airports, Subject: FW: Traffic Impact Studies for Construction-Related Impacts, January 19, 2017.

[139] U.S. Department of Transportation, Comprehensive Truck Size and Weight Study, Volume III Scenario Analysis, Chapter IX Traffic Operations, Publication Number: FHWA-PL-00-029 (Volume III), August 2000. Available: https://www.fhwa.dot.gov/reports/tswstudy/Vol3-Chapter9.pdf.

Highway, which connects with Sepulveda Boulevard to the other roads to the east. Regional access is provided via Interstate 405 (I-405) and Interstate 105 (I-105). The following briefly describes each of those roadways.

- I-405 (San Diego Freeway) - This north-south freeway provides regional access to the airport and the surrounding area. Access to the airport area is provided via ramps at Howard Hughes Parkway, Century Boulevard, I-105, Imperial Highway, and three locations along La Cienega Boulevard.
- I-105 (Glenn M. Anderson or Century Freeway) - Along with Imperial Highway (described below), this east-west freeway extends from the San Gabriel Freeway (I-605) on the east to Sepulveda Boulevard on the west. Access to the airport area is provided via ramps at Sepulveda Boulevard and along Imperial Highway.
- Imperial Highway - This east-west roadway is located at-grade and beneath much of the elevated I-105 freeway. The number of lanes on this roadway varies from six-lanes east of the merge with I-105 to four-lanes west of the merge with I-105. Imperial Highway, along with the segment of Pershing Drive between Imperial Highway and World Way West, is the primary route for truck trips to and from the western portion of the airport.
- Pershing Drive - This north-south four-lane divided roadway forms the western boundary of the construction traffic analysis study area. The roadway would serve as the exclusive access route for delivery trucks accessing the project site.
- World Way West - This four-lane roadway extends east from Pershing Drive and provides primary access to the LAWA building and tenant facilities in the western portion of the airport.
- Sepulveda Boulevard (State Route 1 south of Lincoln Boulevard) - This major north-south six-lane arterial roadway provides direct access to the airport and project study area via I-405 and Westchester Parkway on the north and via I-105 on the south. Sepulveda Boulevard between I-105 and Century Boulevard is located in a tunnel section beneath the south airfield runways.

The project construction site, construction staging area, and construction parking area would all be located in the same general area at the western end of the airport. As such, all project-related trips to and from the site would end at, or start from, Pershing Drive near World Way West. Construction vehicles, consisting of vendor delivery vehicles and construction employee automobiles, would likely approach the study area in proportion to the regional distributions for other recent development projects at LAX (i.e., Bradley West Project). Based on such regional distributions, it is estimated that approximately 21 percent of the construction-related employee and vendor traffic would access the airport from I-405 north, 23 percent from I-405 south, 32 percent from I-105 east, and 24 percent from local roadways. Based on the haul route for the proposed project (shown in Figure 7), construction-related haul trucks would utilize Imperial Highway as the connection between Pershing Drive and the regional freeway system.

Project Impacts

Construction traffic volumes associated with the proposed project would be relatively low. The peak number of construction employee trips is estimated to be approximately 40 per day. Deliveries and other truck-related activity during the peak construction period would total

approximately 15 trucks (38 PCE) per day during the site preparation/grading phase. As such, the peak project-related trip generation during construction of the proposed project would be approximately 73 vehicle round-trips per day (146 one-way trips), including construction worker commute trips and construction truck trips as adjusted with the PCE factor. (As noted above, this assumes that the peak worker commute trips would occur during the same phase as the peak number of truck trips. As peak worker trips and peak truck trips would occur in different phases, this is a conservative number of trips.) These trips would occur outside of the a.m. and p.m. peak commuter periods.

The City of Los Angeles CEQA Thresholds Guide delineate screening criteria that can assist in determining whether a project's impacts may be significant. Section L, *Transportation*, of the L.A. CEQA Thresholds Guide set forth the following screening criteria relative to evaluating a project's potential traffic impacts:

> "Would the proposed project generate and/or cause a diversion or shift of 500 or more daily trips or 43 or more p.m. peak hour vehicle trips on the street system?"

The L.A. CEQA Thresholds Guide states that a "no" response to this question indicates that there would normally be no significant Intersection Capacity impact or significant impact on Street Segment Capacity from the proposed project. Given the fact that the proposed project's peak construction-related trip generation of approximately 146 trips per day is well below the threshold of 500 daily trips and all of the construction-related trips are proposed to occur outside of p.m. peak hour (as well as outside of the a.m. peak hour), the impacts from the project's construction traffic would be less than significant.

Based on the above discussion, impacts on study area intersections from construction traffic would be less than significant and no further evaluation in the EIR is required.

Standard Control Measures

As shown above, impacts related to construction traffic would be less than significant; therefore, no mitigation measures are required. Nevertheless, LAWA would implement the following standard control measure, which would serve to reduce impacts on area intersections from construction traffic. The individual measures were selected from a list of standard control measures developed by LAWA for projects at LAX. Only those measures that are applicable to the proposed project are identified below. Measure identifiers follow those in the standard control measure; therefore, the identifiers listed below are not consecutive.

- **LAX-ST-1. Construction Traffic Management Plan**

  Prior to initiation of construction, LAWA shall require contractors to complete a construction traffic management plan (CTMP). The CTMP shall include a description and illustrations of how the contractor will manage all construction related traffic during both peak and off-peak traffic periods. The CTMP shall detail the haul routes, locations for variable message and other signs, construction deliveries, construction employee shift hours and parking locations, any lane striping changes and traffic signal modifications, and shuttle system operations, if any. The CTMP shall require approval of the LAWA Construction and Logistics Management (CALM) Team prior to implementation. The CALM Team approval process shall include multiple reviews addressing technical, scheduling and safety-related issues. Depending on the complexity and/or anticipated impacts to traffic flow, detailed review meetings with

the contractor may be required. Contractor compliance shall be monitored throughout the project. LAWA shall require contractors to implement and comply with the following CTMP measures to reduce construction-related traffic impacts associated with projects at LAX, including:

a. Construction Deliveries

Construction deliveries requiring lane closures shall receive prior approval from the CALM Team. Construction notification of deliveries requiring lane closures shall be made in writing (a minimum of seventy-two (72) hours in advance, unless otherwise coordinated with the CALM Team prior to the required closure(s) when a 72-hour advance written notification is not feasible) in order to allow for any modifications to approved traffic detour plans. Delivery permits from all applicable local agencies shall be obtained thirty (30) days prior to any delivery requiring a lane closure, as feasible. To the extent possible, construction deliveries within the CTA requiring lane closures shall be scheduled during overnight hours (1:00 a.m. to 7:00 a.m.) to minimize impacts to Airport operations.

b. Designated Truck Delivery Hours

To the extent possible, truck deliveries of bulk materials such as aggregate, bulk cement, dirt, etc. to the project site, and hauling of material from the project site, shall be scheduled during off-peak hours to avoid the peak commuter and Airport traffic periods on designated haul routes. Peak commuter traffic periods are between 7:00 a.m. to 9:00 a.m. and 4:30 p.m. to 6:30 p.m. Monday through Friday. All deviations to these requirements shall be approved in writing by the CALM Team prior to actual site deliveries.

c. Construction Employee Shift Hours

To the extent possible, the beginning and ending times of work shifts that avoid peak commuter traffic periods (7:00 a.m. to 9:00 a.m. and 4:30 p.m. to 6:30 p.m. Monday through Friday) shall be established. (This measure may not apply to swing shifts.) To avoid peak commuter traffic, work periods may be extended to include weekend and multiple work shifts, when necessary.

d. Designated Truck Routes

For dirt, aggregate, bulk cement, and all other materials and equipment, truck deliveries to the LAX area shall be on designated routes only (freeways and non-residential streets).

Designated truck routes shall be limited to:

- Aviation Boulevard (Imperial Highway to Manchester Boulevard)
- Manchester Boulevard (Aviation Boulevard to I-405)
- Florence Avenue (Aviation Boulevard to I-405)
- La Cienega Boulevard (north of Imperial Highway)
- Pershing Drive (Westchester Parkway to Imperial Highway)
- Westchester Parkway (Pershing Drive to Sepulveda Boulevard)

- Century Boulevard (Sepulveda Boulevard to Aviation Boulevard)
- Sepulveda Boulevard (Westchester Parkway to Imperial Highway)
- Imperial Highway (Pershing Drive to I-405)
- I-405
- I-105

f. Stockpile Locations

All stockpile locations shall be pre-approved by LAWA and its CALM Team. Stockpile locations/laydown/staging areas shall be accessed by construction vehicles with minimal disruption to adjacent public streets.

Operational Traffic Impacts

The proposed SAAP would include employee parking onsite. Currently, LAWAPD personnel are transported to Post 21 by van. The provision of onsite employee parking would eliminate these transport trips.

Implementation of the proposed project would not increase existing passenger capacity, affect aircraft operations, or increase long-term employment opportunities at LAX. The main purpose of the proposed project is to provide a fully functional and all-encompassing access point onto the AOA on the west side of LAX. A new SAAP is needed on the west side to replace SAAP 5, which was displaced by the MSC North Project, and SAAP 21, which will be taken out of service in May 2017 to enable the full build-out of WAMA. As such, the new SAAP would accommodate existing vehicle trips that recently used or currently use the secured area access points located near the project site. The proposed project would affect the location and process by which vehicles accessing the AOA are screened, but would not result in an increase in the number or type of vehicles that would utilize the new facility. Existing operations at the new SAAP would be the same as at the current nearby SAAP (SAAP 21). Moreover, although the AOA access point would be relocated a half mile to the east, because vehicles would travel to all parts of the AOA once they have passed through the SAAP, the total vehicle miles traveled with implementation of the proposed project is not expected to change from current conditions. As such, impacts on the on- and off-airport roadway network in the vicinity of LAX from implementation of the proposed project would be less than significant and no further evaluation in the EIR 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?

No Impact. The proposed project would provide a fully functional access point onto the AOA on the west side of LAX. Implementation of the proposed project would not increase airport capacity or affect the routing of aircraft in the air to and from LAX. No change in air traffic patterns would occur and no change in safety risks would result. Therefore, no impact would occur and no further evaluation in the EIR is required.

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

Less Than Significant Impact. Construction equipment would be required to use local roadways; however, this would not create a safety hazard. No lane or road closures of public roadways would be required for construction. In accordance with standard LAWA practices, access routes in the vicinity of the project site would be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations.[140] Design of the project is such that it would not substantially increase hazards and the project would be located at an existing airport, which is a compatible use. Therefore, the implementation of the proposed project would not increase hazards due to a design feature or incompatible use. As such, potential impacts would be less than significant and no further evaluation in the EIR is required.

e. Result in inadequate emergency access?

Less Than Significant Impact. No lane or road closures of public roadways would be required for construction. As described in Section XIV.a above, construction of the new SAAP would eliminate the current landside access route to Fire Station 80/ARFF; however, access to Fire Station 80/ARFF would be maintained by providing an access road along the south side of the new SAAP. As proposed, the entrance to this new access road would be located off of World Way West, adjacent to the proposed SAAP access point. The LAWA CALM Team would ensure that occupancy and operation of adjacent and surrounding facilities, including Fire Station 80/ARFF, would be maintained throughout demolition and construction activities. In addition, in accordance with standard LAWA practices, during construction all emergency access routes in the vicinity of the project site would be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations.

The proposed SAAP would include an independent emergency lane to provide dedicated access for emergency vehicles. The emergency lane would be intended to be used by LAWA and LAFD emergency vehicles. This lane would allow vehicles in process in the SAAP to remain in their positions while emergency vehicles are allowed to pass. This would improve response times for emergency vehicles access the AOA.

For the reasons described above, the proposed project would not result inadequate emergency access. Potential impacts would be less than significant with the implementation of the proposed project and no further evaluation in the EIR 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. The proposed project would not alter access to or within LAX by public transportation vehicles (e.g., buses or shuttles) and would not remove sidewalks or other pedestrian facilities within the airport. There are no bicycle facilities (such as bicycle lanes) located on or near the project site; therefore, implementation of the proposed project would not affect bicycle

[140] U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular (AC) 150/5300-13A, Airport Design, February 26, 2014. Available: http://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentNumber/150_5300-13.; U.S. Department of Transportation, Federal Aviation Administration, Federal Aviation Regulations (FAR) Sections 139.315–139.319 – Air Rescue and Firefighting (ARFF); 24 California Code of Regulations, Part 9 – California Fire Code, Chapter 9 (Fire Protection Systems) and Chapter 10 (Means and Egress); and City of Los Angeles, Los Angeles Municipal Code, Chapter V, Article 7 – Fire Protection and Prevention (Fire Code).

facilities. The City of Los Angeles Mobility Plan 2035 does not identify any new transit, bicycle, or pedestrian facilities on the west side of LAX.[141] Implementation of the proposed project is within the LAX boundary and would not conflict with any adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilties, or otherwise decrease the performance or safety of such facilities. Therefore, no impact would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

XVII. TRIBAL CULTURAL RESOURCES. *Would the project:*

a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

- **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k), or**
- **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

Potentially Significant Impact. There are no known tribal cultural resources, as defined in Public Resources Code Section 21074, on the project site or in the immediate vicinity. The project site is highly disturbed.

A Sacred Lands File (SLF) records search for the project site was commissioned through the California Native American Heritage Commission (NAHC) to determine whether any Native American cultural resources in the NAHC database were located within the project site or within a half-mile radius. An SLF records search is one tool a lead agency can use to determine whether tribal cultural resources may exist within the vicinity of a project. On February 17, 2017, the NAHC indicated that the SLF records search was completed with negative results. The NAHC results also noted, however, that the absence or resource information in the SLF inventory does not preclude the discovery of cultural resources within any project area.[142]

When LAWA initiated preparation of the Notice or Preparation for the proposed project, LAWA had not received a written request from any tribe indicating its wish to be notified of projects within its traditionally and culturally affiliated areas, as required by Public Resources Code Section 21080.3.1(b). Nevertheless, in a letter dated November 24, 2015, NAHC recommended that, as an AB 52 best practice, agencies should initiate consultation with the tribes

[141] City of Los Angeles, Department of City Planning, Mobility Plan 2035: An Element of the General Plan, Maps B, D1, D2, and F, December 17, 2015, as adopted January 20, 2016. Available: http://planning.lacity.org/documents/policy/mobilityplnmemo.pdf.

[142] Totton, Gayle, Associate Governmental Program Analyst, State of California Native American Heritage Commission, Letter to Robin Ijams, CDM Smith, RE: Proposed LAX Secured Area Access Post Project, City of Los Angeles; Los Angeles County, California, February 17, 2017.

that are culturally and traditionally affiliated with their jurisdictions.[143,144] LAWA initiated the proposed project prior to the July 1, 2016 date by which NAHC was required to provide each tribe with a list of all public agencies that may be lead agencies under CEQA within the geographic area with which the tribe is traditionally and culturally affiliated. In light of the timing of project initiation, and consistent with NAHC-suggested "best practice" procedures, letters were sent via certified mail on May 27, 2016 to the six Native American individuals and organizations identified by the NAHC in November 2015 as being affiliated with the vicinity of the project area[145] to request information or concerns they may have about Native American cultural resources that may be affected by the proposed project.[146,147] Each Native American group and/or individual listed was sent a project notification letter and map and was asked to convey any knowledge regarding prehistoric or Native American resources (archaeological sites, sacred lands, or artifacts) located within the project area or surrounding vicinity. The letter included information such as project location, a brief description of the proposed project, and results of a previous cultural resources assessment that included the CTA. A response was received on May 28, 2016 from one Native American tribe. That response did not identify any known Tribal cultural resources that may be affected by the proposed project but did state that there is a possibility that unknown, yet significant, cultural resources could be encountered during ground disturbance activities. Consultation with this tribe, which is intended to fulfill "best practices" as recommended by NAHC, is ongoing. The potential for the proposed project to result in impacts to tribal cultural resources will be evaluated in the EIR, following completion of consultation with the tribe.

143 Wood, Rob, Associate Environmental Planner, State of California Native American Heritage Commission, Letter to Angelica Espiritu, City of Los Angeles, Los Angeles World Airports, RE: Los Angeles International Airport (LAX) Terminal 1.5 Project, City and County of Los Angeles, November 24, 2015.

144 Although the subject of the November 24, 2015 letter from NAHC was the LAX Terminal 1.5 Project, in a subsequent electronic mail message received from NAHC on January 14, 2016, NAHC indicated that their November 24. 2015 correspondence could be used for other LAX projects. See: Wood, Rob, Associated Environmental Planner, State of California Native American Heritage Commission, Electronic Mail Message to Robin Ijams, CDM Smith, Subject: RE: AB 52 Local Government Tribal Consultation List Request for LAX Projects, January 14, 2016.

145 California Public Resources Code Section 21080.3.1(c) states "To expedite the requirements of this section, the Native American Heritage Commission shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated with the project area."

146 Per the notification steps specified in AB 52, the NAHC is required to provide each tribe with a list of all public agencies that may be lead agencies under CEQA within the geographic area with which the tribe is traditionally and culturally affiliated, the contact information of those public agencies, and information on how the Tribe may request consultation. This list must be provided on or before July 1, 2016 (California Public Resources Code Section 5097.94(m)). If a tribe wishes to be notified of projects within its traditionally and culturally affiliated area, the tribe must submit a written request to the relevant lead agency (California Public Resources Code Section 21080.3.1(b)). Although not required by AB 52, in accordance with "best practice" suggested by NAHC to ensure that tribes are consulted, on May 27, 2016, LAWA sent letters of "Formal Notification of Determination of a Decision to Undertake a Project and Notification of Consultation Opportunity" for the proposed project to the Gabrielino/Tongva tribes and the Soboba Band of Mission Indians.

147 Per an electronic mail message received from NAHC on January 14, 2016, the Native American consultation list received from NAHC for the LAX Terminal 1.5 Project on November 24, 2015, was approved for use for the proposed project. See: Wood, Rob, Associated Environmental Planner, State of California Native American Heritage Commission, Electronic Mail Message to Robin Ijams, CDM Smith, Subject: RE: AB 52 Local Government Tribal Consultation List Request for LAX Projects, January 14, 2016.

XVIII. UTILITIES AND SERVICE SYSTEMS. *Would the project:*

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

No Impact. As discussed in Section IX.a, the CWA established the NPDES program to control water pollutant by regulating point sources that discharge pollutants into waters of the United States. Examples of pollutants include, but are not limited to, industrial and municipal waste discharged to water. In California, NPDES permits are also referred to as waste discharge requirements (WDRs). In Los Angeles, the NPDES Program is administered by the LARWQCB. WDRs pertaining to wastewater treatment and discharge apply to municipal and non-municipal parties that operate wastewater treatment plants. These wastewater treatment requirements do not apply to indirect dischargers (such as individual users or projects; 40 CFR §122.3). LAWA does not own or operate a wastewater treatment plant; therefore, the wastewater treatment requirements of the LARWQCB do not directly apply to LAWA or to the proposed project. Sanitary wastewater generated by activities at LAX is treated at the Hyperion Treatment Plant, which is operated by the City of Los Angeles Department of Public Works, Bureau of Sanitation. The potential for the proposed project to result in impacts to the Hyperion Treatment Plant are discussed in Section XVIII.b below. The wastewater treatment requirements of the LARWQCB do not directly apply to the proposed project; therefore, implementation of the proposed project would not exceed wastewater treatment requirements and no further evaluation in the EIR is required.

WDRs pertaining to stormwater are addressed in Section IX.a.

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. Sanitary wastewater generated by activities at LAX is treated at the Hyperion Treatment Plant. The City of Los Angeles' Integrated Resources Plan (IRP)[148] identifies the City's plans to accommodate future and cumulative wastewater treatment demand. The City 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. Similarly, the Los Angeles Department of Water and Power (LADWP) has an adopted Urban Water Management Plan that indicates that water supplies in the city will be sufficient to meet projected demands through 2035.[149] The proposed project improvements would not increase passenger capacity at LAX. Operation of the proposed project would not increase the number of employees at the SAAP or the long-term employment opportunities at LAX. Therefore, the proposed project would not result in an increase in use of water or generation of wastewater. Therefore, the proposed project would not result in any adverse impacts related to water demand or wastewater generation, and would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. New connections would be made to tie the proposed SAAP facility to the existing fire, water, sanitary sewer, and domestic water

[148] CH:CDM, A Joint Venture, City of Los Angeles Integrated Resources Plan, Implementation Strategy, September 2006. Available: https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdew/~edisp/cnt010386.pdf.

[149] City of Los Angeles, Department of Water and Power, Urban Water Management Plan, July 2010.

systems located along World Way West. The project would not result in an exceedance of wastewater treatment requirements of the LARWQCB.

Above the basement level of the AA OSF structure, all plumbing and fire sprinkler systems are sourced from locations within the AA OSF and are independent of the CAL GO Building's systems. As such, no building system modifications would be required at the ground floor level to maintain operation of those systems in the AA OSF. However, existing fire sprinkler systems in the AA OSF basement are currently interconnected to, and dependent on, the CAL GO Building services. Therefore, demolition plans for the CAL GO Building would include new service connections for this system from available services in the AA OSF complex. Demolition of the CAL GO Building would be planned and undertaken in a manner to ensure occupancy and operation of the AA OSF during and after demolition.

For the reasons stated above, the proposed project would not 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. Potential impacts related to water and wastewater treatment facilities would be less than significant with implementation of the proposed project and no further evaluation in the EIR 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. As described in Section IX.a, implementation of the proposed project would not materially increase the amount of impermeable surface areas on the project site, or affect drainage patterns or stormwater drainage systems. Therefore, the proposed project would not 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 impacts on stormwater drainage facilities would occur with the implementation of the proposed project and no further evaluation in the EIR 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. As noted in Section XVIII.b above, 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.[150] As discussed in Section XVIII.b above, the proposed project would not increase employment or passenger capacity at LAX or otherwise notably affect water demand. As such, no new or expanded water supply entitlements would be required. Therefore, no impacts on the City's water supply would occur with the implementation of the proposed project and no further evaluation in the EIR is required.

As discussed in Section 3.0, *Project Description*, the proposed project would meet the requirements of LAGBC Tier 1, at a minimum. To conserve potable water, the restrooms in the new SAAP would be designed with low- or ultra-low-flow systems and recycled water would be used for construction-related dust control and construction equipment washing when feasible.

[150] City of Los Angeles, Department of Water and Power, Urban Water Management Plan, July 2010.

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

No Impact. As discussed in Sections XVIII.b above, the proposed project would not increase employment or passenger capacity at LAX or otherwise affect wastewater generation. Implementation of the proposed project would not result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has inadequate capacity to serve the proposed project's projected demand in addition to the provider's existing commitments and no further evaluation in the EIR 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 would result in demolition of the CAL GO Building and excavation of existing soil and concrete pavement which would generate an estimated 33,000 cubic yards of materials that would need to be exported from the site. During construction, some of the construction debris may be able to be reused on the project site. Construction debris that cannot be reused onsite would be recycled off-site or disposed of at a facility permitted to accept inert solid waste (e.g., concrete and asphalt from construction and demolition activities). Overall, non-hazardous construction and demolition debris generated at the site would be recycled or salvaged to achieve a 65 percent diversion in construction waste. The total remaining permitted inert[151] (or unclassified landfill) waste capacity in Los Angeles County was estimated to be approximately 59.83 million tons in 2014 (excluding inert debris disposal sites). Based on the average countywide 2014 disposal rate of 1,012 tons per day (tpd), this capacity would be exhausted in 189 years.[152] Therefore, there is no projected shortfall in disposal capacity for inert waste within Los Angeles County; potential impacts to landfills would be less than significant and no further evaluation in the EIR is required. See Sections VIII.a-b above regarding disposal of hazardous wastes.

The proposed project would generate minimal amounts of solid waste during project operations. Solid waste generated from operation of the new SAAP that cannot be recycled would likely be taken to the Sunshine Canyon Landfill. The Sunshine Canyon Landfill is a Class III landfill located at 14747 San Fernando Road in Sylmar, California, approximately 35 miles from the project site. Sunshine Canyon Landfill is owned and operated by Republic Services, Inc., and has a maximum permitted throughput of 12,100 tons per day.[153] As of December 31, 2014, this facility had a remaining capacity of 87,416,245 cubic yards, and currently has an estimated closure

[151] Inert waste is waste that does not undergo any significant physical, chemical, or biological transformations. Examples of inert waste include construction and demolition debris.

[152] County of Los Angeles, Department of Public Works, 2014 Annual Report on the County of Los Angeles Countywide Integrated Waste Management Plan, December 2015. Available: https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=3473&hp=yes&type=PDF.

[153] County of Los Angeles, Department of Public Works, 2014 Annual Report on the County of Los Angeles Countywide Integrated Waste Management Plan, December 2015. Available: https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=3473&hp=yes&type=PDF.

date of 2037.[154] The waste types accepted at this facility include construction and demolition debris, green materials, industrial, inert, and mixed municipal waste.

Operation of the proposed project would not increase employment or passenger capacity at LAX or otherwise affect solid waste generation. As noted above, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and would comply with federal, state, and local statutes and regulations related to solid waste. As such, impacts related to solid waste disposal would be less than significant with the implementation of the proposed project and no further evaluation in the EIR is required.

As discussed in Section 3.0, *Project Description*, the proposed project would meet the requirements of LAGBC Tier 1, at a minimum. The proposed project would be designed to incorporate recycled building materials to the maximum extent possible. In addition, non-hazardous construction and demolition debris generated at the site would be recycled or salvaged to achieve a 65 percent diversion in construction waste, as required to achieve LAGBC Tier 1 conformance.

XIX. 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, substantially 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?

Potentially Significant Impact. As discussed under Sections IV.a-c and e-f, the proposed project is located in a highly-developed area within the center portion of the west side of LAX. There are no plant or animal species listed on any state or federal lists of endangered, threatened or special status species or riparian/wetland areas, or native trees at the project site or within the construction staging area. Therefore, the proposed project would not 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, or reduce the number or restrict the range of a rare or endangered plant or animal. However, as discussed under Section IV.d, approximately 45 non-native ornamental trees located around the perimeter of the CAL GO Building and within the surface parking area to the west would be removed as part of the proposed project. These trees may be used for nesting by raptors or birds. Removal of such trees would have the potential to result in impacts to nesting birds or raptors protected under the Migratory Bird Treaty Act and/or California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513. Therefore, the EIR for the proposed project will evaluate whether the proposed project would 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.

There are no known archaeological or paleontological located on the project site, and the disturbed nature of the site makes the site's sensitivity to such resources low. Nonetheless, as

[154] County of Los Angeles, Department of Public Works, 2014 Annual Report on the County of Los Angeles Countywide Integrated Waste Management Plan, December 2015. Available: https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=3473&hp=yes&type=PDF.

discussed under Sections V.b-d above, archaeological and paleontological resources have been found at other locations within the airport property, and the potential exists for the destruction of previously unidentified buried archaeological or paleontological resources at the project site during construction, if such resources are present, which would result in a potentially significant impact. In addition, the potential exists for encountering human remains. Therefore, the EIR for the proposed project will evaluate whether construction of the proposed project would: cause a substantial adverse change in the significance of a historical resource defined by State CEQA Guidelines Section 15064.5; cause a substantial adverse change in the significance of an archaeological resource defined by State CEQA Guidelines Section 15064.5; directly or indirectly destroy a unique paleontological resource or site; or disturb any human remains, including those interred outside of dedicated cemeteries.

As described in Section V.a, construction of the new SAAP would require the demolition and removal of the former CAL GO Building, which is vacant. The CAL GO Building was built in 1963, with a new west entrance to the building added in 1974. The CAL GO Building is over 50 years old, was constructed as the administrative headquarters for Continental Airlines during its peak years as an international airline, and is directly associated with the rapid growth and expansion of commercial aviation reflecting the period during which LAX became a major international airport. For these reasons, the CAL GO Building has been identified as potentially eligible for listing in the California Register of Historical Resources and/or as a Los Angeles Historic-Cultural Monument. For similar reasons, the former CAL Training Center Building to the west of the project site has also been identified as potentially eligible for listing in the California Register of Historical Resources and/or as a Los Angeles Historic-Cultural Monument. Furthermore, the CAL GO Building, CAL Training Center Building, and associated Continental Airlines complex of hangars, shops, and storage facilities were also identified as potentially eligible for listing in the California Register as a historic district. The project EIR will evaluate the potential for the proposed project to eliminate important examples of the major periods of California history, and determine whether the project would cause a substantial adverse change in the significance of a historical resource defined by State CEQA Guidelines Section 15064.5.

As discussed in Section XVII.a, there are no known tribal cultural resources, as defined in Public Resources Code 21074, on the project site or in the immediate vicinity. An SLF records search was completed by NAHC with negative results. However, these results do not preclude the discovery of tribal cultural resources within the project area. LAWA initiated consultation with tribes within the geographic area of LAX, as identified by NAHC. A response was received from one Native American tribe. That response did not identify any known Tribal cultural resources that may be affected by the proposed project but did state that there is a possibility that unknown, yet significant, cultural resources could be encountered during ground disturbance activities. Consultation with this tribe, which is intended to fulfill “best practices” as recommended by NAHC, is ongoing. The potential for the proposed project to result in impacts to tribal cultural resources will be evaluated in the EIR, which will help determine whether the proposed project has the potential to eliminate important 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 a project are considerable when viewed in connection with the effects of past

projects, the effects of other current projects, and the effects of probable future projects).

Potentially Significant Impact. Cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."[155] Section 15130(b) of the State CEQA Guidelines sets forth two approaches for analyzing cumulative impacts:

- A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
- A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include a general plan, regional transportation plan, or plans for the reduction of GHG emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program.

To evaluate the proposed project's contribution to cumulative impacts, the first of the two options, commonly referred to as "the list approach," was used to delineate cumulative development. Projects at/adjacent to LAX are listed in **Table 10**, which includes projects on the airport and areas immediately adjacent to the airport, whose development may result in cumulative impacts. A description of each project is also provided in Table 10. Projects with construction schedules projected to overlap with the construction schedule for the proposed project are indicated in **bold** type. The projects listed in Table 10 were considered in the cumulative impacts analysis below.

Table 10
Development Projects At/Adjacent to LAX

	Project	Dates	Description
Past Projects			
1	Central Utility Plant Replacement Project (CUP – RP)	May 2011 – March 2015	Replacement CUP and related underground piping network within CTA.
2	Runway 6L-24R Runway Safety Area Improvements Project – North Airfield	June 2015 – Oct 2015	Improvements to Runway 6L-24R included implementation of declared distances to meet FAA Runway Safety Area (RSA) requirements. The Runway 6L-24R RSA Project also required the demolition and reconstruction of service roads and the relocation of the AOA fence and security gates.

[155] 14 California Code of Regulations, Section 15355, Cumulative Impacts.

Table 10
Development Projects At/Adjacent to LAX

	Project	Dates	Description
	Present Projects		
3	**South Terminal Improvements**	Nov 2011 – Dec 2018	Major interior improvements and building system upgrades within the South Terminal complex, particularly Terminal 5 and Terminals 6-8.
4	**LAX Bradley West Project**	Nov 2013 – Nov 2017	Replacement of existing concourses and aprons at the TBIT with new concourses and gates at Bradley West. Work includes demolition of existing TBIT concourses and installation of east gates/aprons along Bradley West concourses. Also includes Taxilane T project and construction of secure/sterile passenger and baggage connection between the TBIT core and Terminal 4. Although construction of a similar connection between TBIT core and Terminal 3 is also part of the overall Bradley West Project, it is broken out separately below (project 18), as its construction would not begin until after the majority of the Bradley West improvements are completed.
5	**Terminal 1 Improvements**	Aug 2014 – Dec 2018	Major interior improvements and building system upgrades to Terminal 1, including addition of floor space and reconfiguration of gates.
6	**West Aircraft Maintenance Area Project**	Aug 2014 – Jan 2018	The West Aircraft Maintenance Area (WAMA) project will allow for more efficient and effective maintenance of existing aircraft at LAX, including Aircraft Design Group (ADG) VI aircraft (Airbus A380s and Boeing 747-8s). The project includes aircraft parking and maintenance facilities, employee parking areas, and related storage, equipment, and facilities. The project will be able to accommodate up to 8 ADG VI aircraft simultaneously or 18 ADG III aircraft (aircraft similar in size to, and including, Boeing 737s). The first phase of the WAMA Project was completed in July 2016. The second phase of the WAMA Project (construction of an additional maintenance hangar) will be dictated by market conditions and is projected to be completed by 2018.
7	Runway 6R-24L Runway Safety Area Improvements Project – North Airfield	Aug 2015 – Nov 2016	Improvements to both ends of Runway 6R-24L, including an easterly shift of the runway and reconfigured taxiways to meet FAA RSA requirements. The Runway 6R-24L RSA Project also required the relocation of a security post and the taxicab holding/staging area.

Table 10
Development Projects At/Adjacent to LAX

	Project	Dates	Description
8	**Runway 7L-25R Runway Safety Area Improvements Project – South Airfield**	May 2016 – Nov 2017	Improvements at west end of Runway 7L-25R, including runway and connecting taxiway extensions to meet FAA RSA requirements. Rehabilitation of deteriorating concrete at east end of runway and Taxiway B.
9a	**Metro Crenshaw/LAX Transit Corridor Project**	Jan 2015 – 2019	The Los Angeles County Metropolitan Transportation Authority (Metro) is constructing the Crenshaw/LAX Transit Corridor Project, which includes an 8.5-mile light-rail transit line that will connect the existing Metro Green Line and the Metro Expo Line at Crenshaw and Exposition Boulevards. As part of this project, a station is being constructed in proximity to LAX near the intersection of Century Boulevard and Aviation Boulevard.
9b	**Airport Metro Connector (AMC) 96th Street Transit Station**	2020 - 2023	Metro will be constructing a new multi-modal transportation center at 96th Street and Aviation Boulevard to connect LAX to the regional bus and transit system. Components of the AMC Station include three at-grade light rail transit (LRT) platforms, bus plaza, bicycle hub, pedestrian plaza, passenger vehicle pick-up and drop-off area and Metro transit center/terminal building ("Metro Hub") to connect passengers between the multiple transportation modes.
10	**LAX Midfield Satellite Concourse (MSC) North Project**	April 2015 – Nov 2019	The MSC North Project consists of a satellite concourse west of TBIT that would include up to 12 aircraft gates that could accommodate ADG V and ADG VI aircraft. The MSC North Project includes associated apron areas, a new crossfield taxiway, a taxilane, and provisions for an underground tunnel.
11	Hyperion Treatment Plant Connector	Aug 2016 – Aug 2017	This project will provide a connection from LAWA's existing retention basin within the southwest portion of LAX to the existing North Central Outfall Sewer (NCOS) interceptor that runs within LAWA property and is connected to the Hyperion Treatment Plant (HTP). The purpose of this connection is to convey the stormwater flow from LAWA's Imperial and Pershing subdrains (approximately 1,200 acres) to the HTP, to help LAWA comply with the City's Low Impact Development and Industrial General Permit requirements. Improvements include construction of an

Table 10
Development Projects At/Adjacent to LAX

	Project	Dates	Description
			approximately 4'-diameter connection to the NCOS, and installation of pumps and related electrical and mechanical equipment.
N/A	**Miscellaneous Projects and Improvements**	Jan 2014 – July 2020	LAWA will undertake a wide variety of smaller miscellaneous projects and improvements mostly related to repair/replacement of, and upgrades to, existing facilities at LAX, including, but not limited to, runway repair/rehabilitation; elevators/escalators replacement; CTA second level roadway repairs; terminal taxilanes and aprons rehabilitation; passenger boarding bridge replacements; terminal electrical, plumbing, and facilities upgrades; miscellaneous demolition; and other improvements.
12	**Terminal 2 Improvements**	Jan 2014 – Jan 2018	Major interior improvements and building system upgrades to Terminal 2.
15	Terminal 3 Improvements	Nov 2015 – Nov 2016	Minor interior improvements to implement regulatory upgrades in Terminal 3.
Probable Future Projects			
13	**Runway 7R-25L Rehabilitation**	Sep 2017 – Dec 2018	Reconstruction of runway pavement.
14	**LAX Northside Development**	April 2016 – June 2025	The Northside Development will transform approximately 340 acres of under-utilized land on the north side of the airport to better serve LAWA and the local communities of Westchester and Playa del Rey.
16	**Argo Drain Sub-Basin Stormwater Infiltration and Treatment Facility**	March 2017 – April 2019	Also referred to as the Westchester Stormwater Best Management Practices Project, this project would develop a 22-acre stormwater infiltration facility north of Westchester Parkway and east of Pershing Drive that would treat both City of Los Angeles and LAWA stormwater flows from the Argo watershed.
17	**Terminal 1.5**	June 2017 – July 2019	Terminal 1.5 would be constructed between existing Terminal 1 and Terminal 2 to provide additional passenger processing facilities for the north passenger terminals.

Table 10
Development Projects At/Adjacent to LAX

	Project	Dates	Description
18	**Terminal 3 Connector**	Oct 2017 – Sep 2019	The Terminal 3 connector would provide a passenger connection between TBIT and Terminal 3 on the north side, similar to the Terminal 4 connector.
19	**Canine Facility**	Jan 2018 – Jan 2019	New canine facility for the Airport Police Department as part of the LAX Northside Development.
20	**Secured Area Access Post (SAAP) Project [*Proposed Project*]**	Fourth Quarter 2017 – Second Quarter 2020[1]	Proposed Project – Section 3.0 provides a detailed description of the Secured Area Access Post Project.
21	**Terminals 2 and 3 Modernization Project**	April 2017 – Sep 2023	Improvements to Terminals 2 and 3, consisting of upgrading the Terminal 2 concourse, including construction of additional floor area; the demolition and reconstruction of the Terminal 3 concourse building to provide additional concourse area, including a new operation control center; the demolition of the southern appendages of the Terminal 3 satellite; the demolition and reconstruction of the passenger and baggage processing facilities (ticketing buildings) at Terminals 2 and 3, including new facilities for passenger and baggage screening, ticketing, and baggage claim; and a secure connector between Terminals 2 and 3.
22	**Airport Security Buildings**	Jan 2019 – Jan 2021	Relocation of LAWA Police Department building to LAX Northside, which will include a shooting range.
23	**Concourse 0**	April 2019 – March 2023	Concourse 0 would be constructed to the east of Terminal 1, in the current location of the Park One surface parking lot. Concourse 0 would provide up to 660,000 square feet of floor space, including 11 aircraft gates.
24	**MSC South Project**	2020 - 2025	The MSC South concourse would be constructed on the south end of the MSC North concourse in order to provide up to 18 additional aircraft gates. The facility would provide approximately 560,000 square feet of floor space.
N/A	**Southern California Metroplex Aircraft Route and Airspace Management Structure Optimization (SoCal Project)**	Proposed implementation in Fall of 2016	The FAA SoCal Project seeks to improve the efficiency of airspace in the Southern California Metroplex by optimizing aircraft arrival and departure procedures at Southern California airports. The FAA project may involve changes in aircraft flight paths and altitudes in certain areas, but would not result in any ground disturbance or increase the number of aircraft operations within the Southern California airspace. FAA published

Table 10
Development Projects At/Adjacent to LAX

	Project	Dates	Description
			a Final Environmental Assessment and Finding of No Significant Impact for the proposed SoCal Metroplex project in 2016.
25	**North Airfield Improvements**	July 2019 - 2025	Improvements to the north airfield could include installation of high-speed taxiways, improvements to existing taxiways, installation of runway status lights, and other safety improvements, including land use compatibility projects with existing Runway Protection Zones.
26	**LAX Landside Access Modernization Program**	end of 2017 – Dec 2035	Improvements within and east of the CTA to: improve access options and the travel experience for passengers; provide a direct connection to the Metro transit system; provide easier and more efficient access to rental cars; relieve congestion in the CTA and on the surrounding street system; and improve the efficiency and operation of the transportation system serving LAX. The program components include an automated people mover (APM) system, Intermodal Transportation Facilities (ITFs), a Consolidated Rental Car Facility (CONRAC), pedestrian walkway connections to the passenger terminals within the CTA, and roadway improvements.

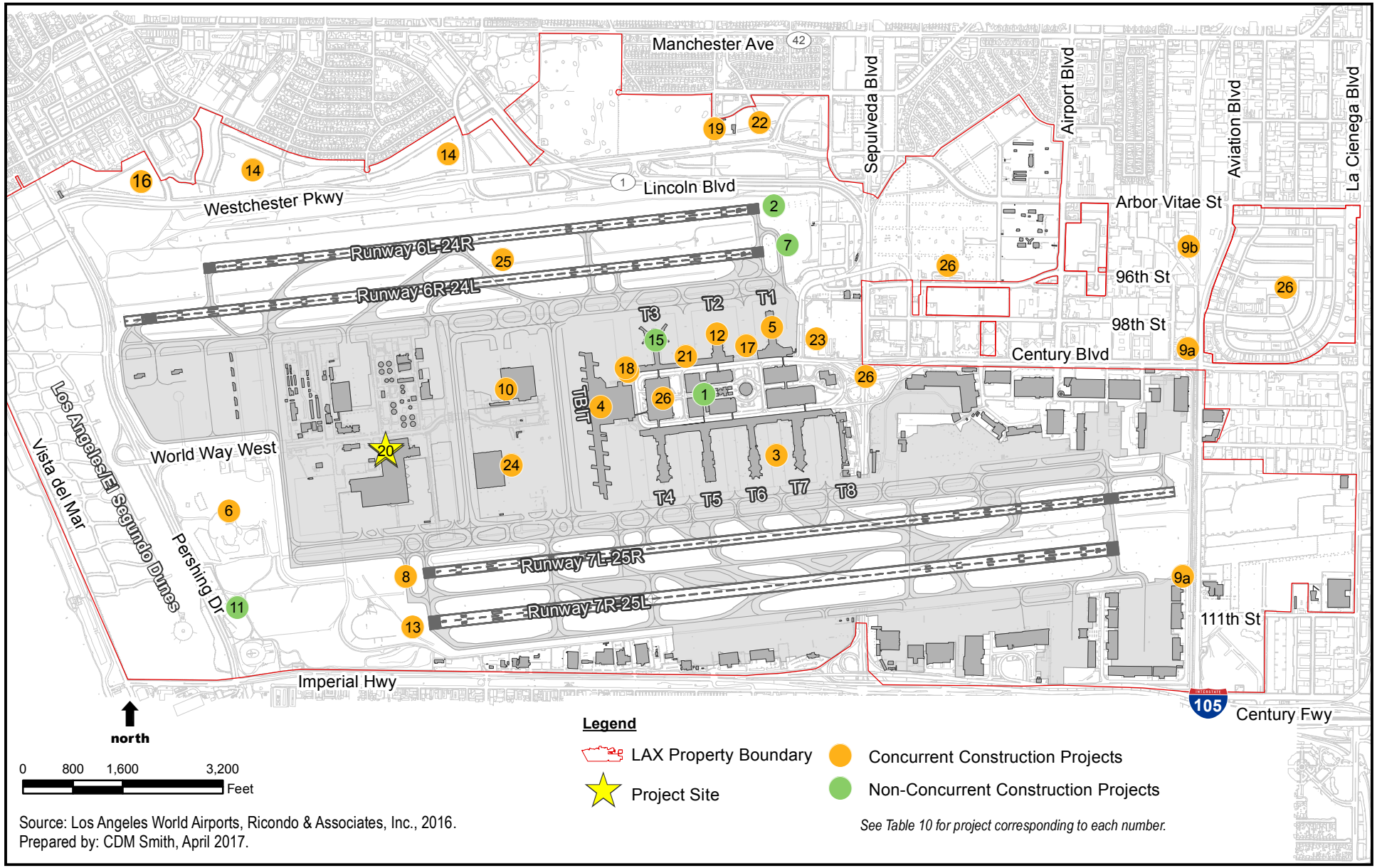
Notes:

Projects shown in **bold** are projected to be under construction concurrent with the LAX SAAP Project.

[1] The proposed SAAP project would take approximately 13 months for demolition and construction. Construction and demolition may not be continuous; the 13 months of construction activity is estimated to occur in the timeframe between the fourth quarter of 2017 and the second quarter of 2020.

Sources: LAWA, Ricondo & Associates, Inc., 2016.

Figure 9 illustrates the location of the projects in Table 10 in relationship to the project site. Miscellaneous Projects and Improvements are not on the figure because they occur at multiple locations throughout the airport, nor is the Southern California Metroplex Aircraft Route and Airspace Management Structure Optimization (SoCal Project) shown, for the reasons indicated in Table 10.



Source: Los Angeles World Airports, Ricondo & Associates, Inc., 2016.
Prepared by: CDM Smith, April 2017.

LAX Secured Area Access Post Project	Development Projects At/Adjacent to LAX	Figure 9

Cumulative Impacts

Based on current project schedules, construction of many of the projects identified in Table 10 located at/adjacent to LAX would overlap with construction of the proposed project, which is estimated to occur over 13 months in the timeframe between the fourth quarter of 2017 and the second quarter of 2020. Projects at/adjacent to LAX projected to be under construction concurrent with the proposed project are identified in Table 10 and Figure 9. The identification of projects whose construction would overlap with that of the proposed project may be conservative. Depending upon actual project construction dates of the SAAP, some projects that are shown as overlapping may not in fact overlap with construction of the proposed SAAP.

Potential cumulative impacts would occur during construction of the proposed project due to the proximity of the other projects at/adjacent to LAX and overlap in the construction periods; therefore, the proposed project could contribute to cumulative impacts during construction. The proposed project could also contribute to potential cumulative operational impacts. Although the project would not increase existing passenger activity, affect aircraft operations, or increase long-term employment opportunities at LAX, the proposed project would use energy, which would result in indirect emissions of criteria pollutants and GHG. The potential for the proposed project to contribute to cumulative impacts is addressed for each resource area below. The analysis below identifies the geographic scope of cumulative development projects that was considered for each resource area.

Aesthetics

The geographic scope of cumulative impacts related to aesthetics consists of the project site, inclusive of the onsite construction area and the adjacent construction staging area, and parcels in close proximity to the project site. The subject area is highly developed, is not visible from any scenic highways and does not have any trees or rock outcroppings of scenic significance. The proposed project would be visually consistent with existing adjacent airport-related uses and would not create a new source of substantial light and glare, nor would the proposed facility detract from views of scenic vistas of the Santa Monica Mountains. Additionally, other development projects proposed at or near LAX would be generally consistent with the existing urbanized character of the area. Therefore, the contribution of the proposed project to cumulative impacts related to aesthetics would not be cumulatively considerable and no further evaluation in the EIR is required.

Agricultural and Forestry Resources

The geographic scope of cumulative impacts related to agricultural and forestry resources consists of the project site, inclusive of the onsite construction area and the adjacent construction staging area, and parcels in close proximity to the project site. The subject area is in an urbanized area with no agricultural or forest land or uses in the vicinity. Similarly, the sites of past, present, and probable future projects at and adjacent to LAX do not include agricultural or forest land. Therefore, no cumulative impacts related to agricultural or forestry resources would occur.

Air Quality

As discussed under Section III.c, according to the SCAQMD,[156] projects that do not exceed the SCAQMD's significance thresholds are generally not considered to be cumulatively significant. As shown in Tables 3 and 4, emissions of the all criteria pollutants from construction and operational

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

activities, including the nonattainment pollutants (PM10, PM2.5, and O_3 precursors [NO_x and VOC]), would be less than the respective SCAQMD significance thresholds. Therefore, the contribution of the proposed project to cumulative air quality emissions of these pollutants would not be cumulatively considerable.

The greatest potential for TAC emissions during construction would be diesel particulate matter (DPM) emitted from heavy-duty diesel powered equipment. DPM is the engine exhaust particulate matter from diesel engines and equipment and is a component of PM10 and PM2.5. The LSTs do not include a threshold for DPM. However, as shown in Table 6, PM10 and PM2.5 emissions would be substantially lower than the respective LST thresholds. Since DPM emissions are a component of PM10 and PM2.5, DPM emissions would be similarly low. Therefore, the contribution of the proposed project to cumulative TAC emissions would not be cumulatively considerable.

The use of diesel equipment during construction would generate near-field odors that are considered to be a nuisance. Construction activities associated with the proposed project and other cumulative projects would use heavy diesel equipment and, therefore, would emit near-field odors. Due to the temporary nature of construction activities and the distance of the project site and immediately surrounding sites from sensitive receptors, odors from construction-related diesel exhaust would not affect a substantial number of people. Therefore, the contribution of the proposed project to cumulative impacts related to odors would not be cumulatively considerable.

Biological Resources

The geographic scope of cumulative impacts related to biological resources consists of the project site, inclusive of the onsite construction area and the adjacent construction staging area, and parcels in close proximity to the project site. The subject areas are highly developed and/or disturbed and do not contain any sensitive biological resources (i.e., sensitive or special status species or habitats; riparian/wetland areas), or native trees. Further, there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan applicable to the project area. Therefore, no cumulative impacts would occur related to the sensitive biological resources described above, and no further evaluation in the EIR is required.

As discussed under Section IV.d, approximately 45 non-native ornamental trees located around the perimeter of the CAL GO Building and within the surface parking area to the west would be removed as part of the proposed project. These trees may be used for nesting by raptors or birds. Removal of such trees would have the potential to result in impacts to nesting birds or raptors protected under the Migratory Bird Treaty Act and/or California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513. Therefore, the EIR for the proposed project will evaluate whether the proposed project would 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, including evaluation of potential cumulative effects and the potential of the proposed project to make a cumulatively considerable contribution.

Cultural Resources

As discussed in Section V.a, construction of the new SAAP would require the demolition and removal of the former CAL GO Building, which is vacant. The CAL GO Building was built in 1963, with a new west entrance to the building added in 1974. The CAL GO Building is over

50 years old, was constructed as the administrative headquarters for Continental Airlines during its peak years as an international airline, and is directly associated with the rapid growth and expansion of commercial aviation reflecting the period during which LAX became a major international airport. For these reasons, the CAL GO Building has been identified as potentially eligible for listing in the California Register of Historical Resources and/or as a Los Angeles Historic-Cultural Monument. For similar reasons, the former CAL Training Center Building to the west of the project site has also been identified as potentially eligible for listing in the California Register of Historical Resources and/or as a Los Angeles Historic-Cultural Monument. Furthermore, the CAL GO Building, CAL Training Center Building, and associated Continental Airlines complex of hangars, shops, and storage facilities were also identified as potentially eligible for listing in the California Register as a historic district. The proposed project EIR will evaluate the potential for the proposed project to eliminate important examples of the major periods of California history, including evaluation of potential cumulative effects and the potential of the proposed project to make a cumulatively considerable contribution.

As also discussed in Sections V and XVII, construction activities associated with the proposed project have the potential to result in significant impacts to archaeological resources, paleontological resources, and human remains, should they be unexpectedly encountered during project-related grading and excavation. As such, the EIR will address potential impacts to archaeological resources, paleontological resources, and human remains, including evaluation of potential cumulative effects and the potential of the proposed project to make a cumulatively considerable contribution.

Geology and Soils

The geographic scope of cumulative impacts related to geology and soils consists of the project site, inclusive of the onsite construction area and the adjacent construction staging area, and parcels in close proximity to the project site. There is no evidence of faulting within the subject area, and it is not located within a State of California Earthquake Fault Zone (formerly known as an Alquist-Priolo Special Study Zone). The proposed project would not increase exposure of people or structures to risks or exacerbate risks associated with rupture of a known earthquake fault, strong seismic ground shaking, or seismic-related ground failure. The subject area is relatively flat and is not located within a landslide hazard area. The potential for soil erosion on the project site is low due to the level topography of the area and the fact that the area consists almost entirely of impervious surfaces. Foundation design features and construction methods would reduce the potential for settlement and hazards associated with expansive soils at the subject area due to the presence of artificial fill. As with the proposed project, past, present, and probable future projects at and adjacent to LAX would be designed and constructed in accordance with LABC and UBC requirements to minimize potential risks and hazards associated with geology and soils. The proposed project and past, present, and probable future projects at and adjacent to LAX are located in an urbanized area where wastewater infrastructure is in place and would not involve the use of septic tanks or alternative wastewater disposal systems. The potential impacts of the proposed project would be less than significant, and the contribution of the proposed project to cumulative impacts related to geology and soils would not be cumulatively considerable and no further evaluation in the EIR is required.

Greenhouse Gas Emissions

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 Section VII, Greenhouse Gas Emissions, is a cumulative analysis. As indicated therein, GHG emissions associated with project operations combined with amortized construction emissions would

be less than the SCAQMD-adopted thresholds of significance. Moreover, the proposed project would not conflict with plans, policies, or regulations pertaining to GHG emissions. Therefore, the contribution of the proposed project to cumulative impacts related to greenhouse gas emissions would not be cumulatively considerable and no further evaluation in the EIR is required.

Hazards and Hazardous Materials

The geographic scope of cumulative impacts related to hazards and hazardous materials consists of the project site, inclusive of the onsite construction area and the adjacent construction staging area, and parcels in close proximity to the project site. All past, present, and probable future projects that involve the handling of hazardous materials and/or remediation of hazardous wastes would be subject to the same regulations regarding waste handling, removal, transport, and storage as the proposed project. Implementation of these preventative measures would minimize the potential for risks associated with hazardous materials, including routine transport, use or disposal, as well as risk of upset or accidental release. The proposed project and the other nearby projects would not result in 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. Therefore, the contribution of the proposed project to cumulative impacts related to the handling of hazardous materials would not be cumulatively considerable and no further evaluation in the EIR is required.

The proposed project is not within 0.25 mile of an existing or proposed school. Therefore, the contribution of the proposed project to cumulative impacts related to handling hazards or hazardous materials in the vicinity of a school would not be cumulatively considerable and no further evaluation in the EIR is required.

The project site and nearby development are located within a public airport (i.e., LAX). Numerous safeguards are required by law to minimize the potential for, and the effects from, an aviation-related accident if one were to occur. The proposed project and the other nearby past, present, and probable future projects would be designed in accordance with FAA standards and/or City regulations to protect people and property on the ground. 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. All construction activities would comply with applicable aviation-related safeguards, and thus would not create a safety hazard. Therefore, the contribution of the proposed project to cumulative impacts related to safety hazards for people residing or working in the project area would not be cumulatively considerable and no further evaluation in the EIR is required.

The proposed project and nearby development are not in the vicinity of a private airstrip. Therefore, no significant cumulative safety hazard impacts in association with being in proximity to a private airstrip would occur.

LAWA and tenants of LAX maintain emergency response and evacuation plans to minimize the potential for and the effects of an accident, should one occur. Construction activities at the construction staging area and at the proposed project site would 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. No lane or road closures of public roadways would be required for construction. Construction of the new SAAP would eliminate the current landside access route to Fire Station 80/ARFF; however, access to Fire Station 80/ARFF would be maintained by providing an access road along the south side of the new SAAP. The LAWA CALM

Team would ensure that occupancy and operation of adjacent and surrounding facilities, including Fire Station 80/ARFF, would be maintained throughout demolition and construction activities. In addition, in accordance with standard LAWA practices, all emergency access routes in the vicinity of the project site would be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations. With regards to operations, the proposed SAAP would include an independent emergency lane to provide dedicated access for emergency vehicles. This lane would allow vehicles in process in the SAAP to remain in their positions while emergency vehicles are allowed to pass. This would improve response times for emergency vehicles access the AOA. Based on the above, the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plans. Therefore, the contribution of the proposed project to cumulative impacts related to emergency access would not be cumulatively considerable and no further evaluation in the EIR is required.

The project site and nearby areas are located within a developed airport and surrounded by airport uses, urbanized areas, and the Los Angeles/El Segundo Dunes. There are no fire hazard areas containing flammable brush or grass on the project site. Therefore, no cumulative impacts would occur relative to the exposure of people or structures to hazards associated with wildland fires.

Hydrology and Water Quality

The geographic scope of cumulative impacts related to hydrology and water quality consists of the project site, inclusive of the onsite construction area and the adjacent construction staging area, and parcels in close proximity to the project site. Construction of the proposed project would occur within an area that is currently developed and predominantly paved, with the only exception being small areas of ornamental landscaping. The proposed project would not materially alter existing drainage patterns or surface water runoff quantities on the project site and would not violate any water quality standards or waste discharge requirements. Moreover, implementation of the proposed project would require compliance with the City's LID Ordinance, which would serve to improve existing hydrology and water quality in the subject area. Therefore, the contribution of the proposed project to cumulative impacts related to water quality or alteration of existing drainage patterns would not be cumulatively considerable and no further evaluation in the EIR is required.

Groundwater beneath and near the project site is not used for municipal or agricultural purposes. Construction and operation of the proposed project would be unlikely to involve dewatering and, thus, would not deplete groundwater supplies. The proposed project would not notably increase the amount of impervious surface on the project site and compliance with the City's LID Ordinance requirements would serve to increase surface water infiltration at the project site. Therefore, the contribution of the proposed project to cumulative impacts related to groundwater supplies or groundwater recharge would not be cumulatively considerable and no further evaluation in the EIR is required.

No 100-year flood hazard areas are located within LAX and the proposed project and other development nearby do not involve the construction of housing. Therefore, no cumulative impacts would occur relative to flooding.

The project site is approximately 1.4 miles east of the Pacific Ocean and the area is not located within a potential inundation or tsunami impacted area as delineated on the City of Los Angeles Inundation and Tsunami Hazard Areas map. Mudflows are not a risk as the subject area is located on, and is surrounded by, relatively level terrain and urban development. Therefore, no cumulative impacts would occur related to inundation by seiche, tsunami, or mudflow.

Land Use and Planning

The geographic scope of cumulative impacts related to land use and planning is defined by the boundaries of LAX. The proposed project would have no impact related to land use and planning. The project site and construction staging area are located entirely within the boundaries of a developed airport in an urbanized area and development of the project site within the airport would not disrupt or divide the physical arrangement of an established community. The proposed project improvements are consistent with the LAX Plan land use designation for the site and with the allowable uses under the LAX Specific Plan. 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 subject area. Therefore, no cumulative impacts related to land use and planning would occur.

Mineral Resources

The geographic scope of cumulative impacts related to mineral resources consists of the project site, inclusive of the onsite construction area and the adjacent construction staging area, and parcels in close proximity to the project site. There are no mineral resources or mineral extraction activities within the subject area nor would the proposed project or other development nearby affect the availability or accessibility of mineral resources. As such, no cumulative impacts would occur relative to mineral resources.

Noise

The geographic scope of cumulative impacts related to noise and vibration consists of the project site, inclusive of the onsite construction area and the adjacent construction staging area, and parcels in close proximity to the project site. The subject area is within a public airport in an urban environment that operates 24 hours a day, seven days a week, and 365 days a year, with many existing sources of noise, including aviation noise and traffic noise. Construction of the proposed project would occur in an area generally removed from the communities near LAX. The noise level from construction activity within the project site would not exceed the existing daytime or nighttime ambient noise level at noise-sensitive uses near the airport. Roadways in the project area are heavily traveled. Construction activities associated with the proposed project would not approach the number of trips required to result in a three-fold increase on any area roads, as needed to exceed the threshold of significance. The proposed project is located approximately 55 feet from the CAL Training Building, which is considered to be a vibration-sensitive use due to its status as an historic structure. As shown in Section XII.b, an analysis of vibration from construction activities showed that potential vibration would be below the threshold of significance and impacts would be less than significant. Therefore, the contribution of the proposed project to cumulative impacts related to construction equipment and construction traffic noise, and to groundborne vibration, would not be cumulatively considerable and no further evaluation in the EIR is required.

Implementation of the proposed project involves the construction of a new fully functional SAAP on the west side of LAX. Although there would be a temporary increase in ambient noise levels during construction, operation of the proposed project would not increase overall passenger or aircraft operations at LAX.

The subject area is within a public airport and not located within the vicinity of a private airstrip. Therefore, no cumulative noise impacts would occur in association with being in proximity of a private airstrip.

Population and Housing

The geographic scope of cumulative impacts related to population and housing consists of LAX and the surrounding area. The proposed project and other nearby development would not establish new residential uses. The proposed project would not increase employment opportunities, although past, present, and probable future projects would increase employment opportunities. This growth in employment opportunities would occur within an existing urbanized area that has established infrastructure, a well-developed transportation network, existing housing stock, and existing public services. Given that the area is part of a well-established urban community connected by an existing transportation network and with a large labor pool and housing market, the combined projects would not result in the need for new housing in the project vicinity or the region. Therefore, no cumulative impacts related to population and housing would occur.

Public Services

The geographic scope of cumulative impacts related to public services consists of LAX and the surrounding area. Construction of the new SAAP would eliminate the current landside access route to Fire Station 80/ARFF; however, access to Fire Station 80/ARFF would be maintained by providing an access road along the south side of the new SAAP. The LAWA CALM Team would ensure that occupancy and operation of adjacent and surrounding facilities, including Fire Station 80/ARFF, would be maintained throughout demolition and construction activities. In addition, the proposed SAAP would include an independent emergency lane to provide dedicated access for emergency vehicles. This lane would allow vehicles in process in the SAAP to remain in their positions while emergency vehicles are allowed to pass. This would improve response times for fire protection vehicles that access the AOA. The proposed project would comply with all applicable city, state, and federal codes and ordinances, including LAFD and Los Angeles Building and Safety requirements. The proposed project does not include residential uses nor would it increase long-term employment that would result in need for new or altered fire stations or related facilities, the construction of which could lead to a substantial adverse physical impact. As such, the contribution of the proposed project to cumulative impacts related to fire protection services would not be cumulatively considerable and no further evaluation in the EIR is required.

Demand for on-airport police protection services is typically determined by increases in passenger activity and employees. The proposed project would not increase passenger capacity or long-term employment at LAX that would result in need for additional police protection. In addition, as noted above, the proposed SAAP would include an independent emergency lane to provide dedicated access for emergency vehicles. This lane would allow vehicles in process in the SAAP to remain in their positions while emergency vehicles are allowed to pass. This would improve response times for police vehicles that access the AOA. The proposed project does not include residential uses nor would it increase long-term employment that would result in need for new or altered police stations or related facilities, the construction of which could lead to a substantial adverse physical impact. As such, the contribution of the proposed project to cumulative impacts related to police services would not be cumulatively considerable and no further evaluation in the EIR is required.

The proposed project would not result in an impact on schools, parks, or other public facilities. The proposed project and other nearby projects do not include residential uses nor would they require the development of new or altered schools, parks, or other public facilities, the construction of which

could lead to a substantial adverse physical impact. As such, no cumulative impacts related to schools, parks, or other public facilities would occur and no further evaluation in the EIR is required.

Recreation

The geographic scope of cumulative impacts related to recreation consists of LAX and the surrounding area. The proposed project and other nearby projects do not include development of recreational facilities nor do they include residential development that would require the new or expanded recreational facilities, the construction of which might have an adverse physical effect on the environment. As such, no cumulative impacts would occur related to recreation and no further evaluation in the EIR is required.

Traffic

The geographic scope of cumulative impacts related to traffic consists of the roadway network around LAX. The potential cumulative traffic impacts of the proposed project have been evaluated based on the cumulative traffic impact analysis completed for the Terminal 1.5 Project, which has a construction timeframe generally similar to, and overlapping with, that of the proposed SAAP Project, and has a proposed construction haul route that affects the same roads as those likely to be impacted by the proposed SAAP Project. Specifically, the LAX Terminal 1.5 Project is planned to be under construction from June 2017 to July 2019, which would overlap with construction of the proposed SAAP, which is estimated to occur in the timeframe between the fourth quarter of 2017 and the second quarter of 2020. Moreover, the primary construction haul route for the Terminal 1.5 Project would use Imperial Highway and Pershing Drive, which is also the case for the proposed SAAP Project. Additionally, the cumulative construction traffic impacts analysis completed for the Terminal 1.5 Project specifically includes the proposed SAAP Project among the cumulative projects evaluated in that traffic study. Potential cumulative construction traffic impacts are addressed under Section XVI.a-b of the Terminal 1.5 IS/MND.[157]

The Terminal 1.5 IS/MND concluded that the proposed Terminal 1.5 Project would not result in a significant impact on any of the study area intersections. The cumulative traffic analysis identified 14 intersections that would be significantly impacted during the cumulative peak construction period (July 2019); when both AM and PM peak hours were considered, a total of 23 intersection impacts would occur.[158] However, the IS/MND found that the proposed Terminal 1.5 Project's contribution to such significant cumulative impacts would not be cumulatively considerable at any of the 23 intersection/time period combinations. More specifically, it was determined that the proposed Terminal 1.5 Project would not contribute at all (change in V/C of 0.000) to 18 of the 23 significant intersection impacts, and would only minimally contribute (change in V/C between 0.001 and 0.006) to the remaining 5 of the 23 significant intersection impacts during the cumulative peak construction period (July 2019). Where the Terminal 1.5 Project would have a minimal contribution to the significant impact, this impact would range from 1.1 percent to 1.7 percent. The intersections where the Terminal 1.5 Project would have a minimal contribution to cumulative impacts include Imperial Highway and Main Street (a.m. and p.m. peak hours), Imperial Highway and Sepulveda Boulevard

[157] Incorporated by reference: City of Los Angeles, Los Angeles World Airports, Final Initial Study/Mitigated Negative Declaration (IS/MND) for Los Angeles International Airport (LAX) Terminal 1.5 Project, November 2016. Available: http://www.lawa.org/ourLAX/CurrentProjects.aspx?id=13739.

[158] When considering both intersection location and a.m. and p.m. peak hour time periods, if a significant cumulative impact would occur at an intersection during both the a.m. and p.m. peak hours, this was counted as two intersection impacts.

(a.m. peak hour), Sepulveda Boulevard and Lincoln Boulevard (a.m. peak hour), and Sepulveda Boulevard and Westchester Parkway (a.m. peak hour). As such, it was concluded that implementation of the proposed Terminal 1.5 Project would not result in a cumulatively considerable impact relative to cumulative construction traffic impacts.

Due to the small scale of construction, construction traffic volumes associated with the proposed SAAP Project would be relatively low. Construction shifts would be scheduled such that construction worker commute trips would occur outside of the a.m. and p.m. peak hours. In addition, the majority of truck deliveries would be scheduled during off-peak hours; deviations to this requirement would be required to be approved in writing in advance of the delivery. Therefore, the SAAP Project would have a minimal contribution, if any, to cumulative impacts to roadways in the project area (i.e., Imperial Highway and Main Street, Imperial Highway and Sepulveda Boulevard, Sepulveda Boulevard and Lincoln Boulevard, and Sepulveda Boulevard and Westchester Parkway).

Within Appendix C, *Construction Traffic Report*, of the Terminal 1.5 IS/MND, Table 5 summarizes the estimated construction costs, and the projected start and end dates, of construction for the proposed Terminal 1.5 Project and each of the cumulative projects likely to be under construction concurrent with the Terminal 1.5 Project. The estimated construction costs and associated construction employee hours for each project listed in the table serve as a general indicator of the relative construction intensity of each project. Project No. 17 in Table 5 is the LAX Secured Area Access Post Project, with an estimated construction cost of approximately $4 million and estimated total construction employee hours of 9,000, which is substantially less than the construction cost and employee hours for the Terminal 1.5 Project ($750 million and 1,681,000 hours, respectively). Given that the Terminal 1.5 Project would not result in a cumulatively considerable contribution to significant construction traffic impacts, construction of the proposed SAAP project would also not result in a cumulatively considerable contribution to significant construction traffic impacts.

Tribal Cultural Resources

There are no known tribal cultural resources, as defined in Public Resources Code Section 21074, on the project site or in the immediate vicinity. An SLF records search was completed by NAHC with negative results. However, these results do not preclude the discovery of tribal cultural resources within the project area. LAWA initiated consultation with tribes within the geographic area of LAX, as identified by NAHC. A response was received from one Native American tribe. That response did not identify any known Tribal cultural resources that may be affected by the proposed project but did state that there is a possibility that unknown, yet significant, cultural resources could be encountered during ground disturbance activities. Consultation with this tribe, which is intended to fulfill "best practices" as recommended by NAHC, is ongoing. The EIR will evaluate potential impacts to tribal cultural resources, including evaluation of potential cumulative effects and the potential of the proposed project to make a cumulatively considerable contribution to significant impacts on tribal cultural resources.

Utilities and Service Systems

The geographic scope of cumulative impacts related to utilities and service systems consists of LAX and the surrounding area. The proposed project would not result in significant impacts related to water demand or wastewater generation and would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. Solid waste generated from the proposed project would be negligible when compared to the current capacity available at the

Sunshine Canyon Landfill. Moreover, in compliance with LAGBC Tier 1 standards, the proposed project would incorporate recycled building materials into construction where feasible, and a portion of the construction debris would be salvaged or recycled. Therefore, the contribution of the proposed project to cumulative impacts related to utilities and service systems would not be cumulatively considerable and no further evaluation in the EIR is required.

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

Less Than Significant Impact. Based on the analysis above, implementation of the proposed project would not have any environmental effects which could cause substantial adverse effects on human beings, either directly or indirectly. Therefore, the impact would be less than significant and no further evaluation in the EIR is required.

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Los Angeles World Airports
One World Way, Room 218
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APPENDIX A

Air Quality and Greenhouse Gas Technical Information

APPENDIX A-1

Construction Emissions

LAX
SAAP Construction Emissions

Maximum Daily Construction Emissions, lbs/day

Year	ROG	NOx	CO	SO2	PM10	PM2.5
2018	4.63	56.79	41.81	0.11	7.21	4.53
2019	5.34	23.32	23.94	0.04	2.34	1.52
Max	5.34	56.79	41.81	0.11	7.21	4.53
SCAQMD CEQA Threshold	75.00	100.00	550.00	150.00	150.00	55.00
Significant?	No	No	No	No	No	No

Maximum Annual Construction Emissions, tons/year

Year	ROG	NOx	CO	SO2	PM10	PM2.5
2018	0.44	4.91	3.90	0.01	0.52	0.31
2019	0.10	0.49	0.51	0.00	0.05	0.03
Max	0.44	4.91	3.90	0.01	0.52	0.31
General Conformity de minimis Threshold	10.00	10.00	100.00	100.00	100.00	70.00
Significant?	No	No	No	No	No	No

Maximum Annual Construction Emissions, MT/year

Year	CO2	CH4	N2O	CO2e
2018	728.00	0.10	0.00	730.06
2019	75.38	0.01	0.00	75.68
Total (MT)	803.37	0.11	0.00	805.73
SCAQMD CEQA GHG Industrial Project Threshold				10000.00
Significant?				No

The proposed project would not result in any significant impacts to air quality. Thus, no mitigation is required under CEQA. However, the following CalEEMod model output refers to both “unmitigated” and “mitigated” results. For the purposes of the CalEEMod model output, “unmitigated” results assume no control measures are applied; “mitigated” results assume application of emission reduction measures required by SCAQMD on all projects regardless of significance, such as compliance with Rule 403 for fugitive dust control. For the purposes of CEQA, these measures are not mitigation measures. Rather, and the output files that CalEEMod refers to as “mitigated” results are CEQA considered to be “unmitigated” results for purposes of CEQA.

LAWA SAAP

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.70	1000sqft	0.06	2,700.00	0
Other Asphalt Surfaces	4.04	Acre	4.04	175,982.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

For the purposes of CalEEMod model output, unmitigated results assume no control measures are applied; mitigated results assume application of emission reduction measures required by SCAQMD, including compliance with Rule 403 for fugitive dust control.

Project Characteristics -

Land Use - Building sq ft based on two 350 sq ft guard shacks plus 2,000 sq ft assumed for AA Engineering Building and AA OSF structure exterior walls.

Construction Phase - Demolition/construction activities to be coordinated to not affect airport/aircraft operations. Grading phase includes import/export of topsoil.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment estimate is between 3 acre site default and 5 acre site default

Trips and VMT - Hauling trip length assumes 35 miles to Scholl Canyon Landfill. Soil hauling trips assume average 12 cy per load.

Demolition - Demolition of CAL GO Building (155,500 sq ft) + 20% to account for pedestrian bridge and ancillary structures.

Grading - Assumes site acreage to 5 ft depth.

Architectural Coating - Areas calculated from default equations: Interior area = 2 x floor area x 75%. Exterior area = 2 x floor area x 25%. Traffic coatings = Lot area x 6%. Exterior VOC assumes Rule 1113 limit of 100 g/l for traffic coatings.

Area Coating - Default calculations.

Construction Off-road Equipment Mitigation -

Area Mitigation - SCAQMD Rule 1113 limit of 100 g/l for traffic coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	89,341.00	11,200.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	268,024.00	2,025.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_Nonresidential_Interior	268023	2025
tblConstructionPhase	NumDays	18.00	15.00
tblConstructionPhase	NumDays	230.00	67.00
tblConstructionPhase	NumDays	20.00	87.00
tblConstructionPhase	NumDays	8.00	90.00
tblConstructionPhase	PhaseStartDate	3/9/2019	3/11/2019
tblConstructionPhase	PhaseStartDate	11/10/2018	11/12/2018
tblConstructionPhase	PhaseStartDate	7/7/2018	7/9/2018

tblConstructionPhase	PhaseStartDate	6/30/2018	7/2/2018
tblEnergyUse	LightingElect	4.29	4.92
tblEnergyUse	NT24E	4.62	4.94
tblEnergyUse	NT24NG	0.39	0.55
tblEnergyUse	T24E	5.62	5.76
tblEnergyUse	T24NG	10.54	9.04
tblGrading	AcresOfGrading	45.00	4.00
tblGrading	MaterialExported	0.00	33,000.00
tblGrading	MaterialImported	0.00	33,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripNumber	8,250.00	5,500.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	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	tons/yr										MT/yr					
2018	0.4395	4.9062	3.9036	8.2100e-003	0.5264	0.2089	0.7353	0.2150	0.1937	0.4087	0.0000	727.9973	727.9973	0.0980	0.0000	730.0559
2019	0.1007	0.4908	0.5079	9.1000e-004	0.0187	0.0279	0.0466	5.0200e-003	0.0262	0.0312	0.0000	75.3759	75.3759	0.0143	0.0000	75.6767
Total	**0.5402**	**5.3969**	**4.4116**	**9.1200e-003**	**0.5451**	**0.2368**	**0.7820**	**0.2201**	**0.2198**	**0.4399**	**0.0000**	**803.3732**	**803.3732**	**0.1124**	**0.0000**	**805.7326**

Mitigated Construction

	ROG	NOx	CO	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	tons/yr										MT/yr					
2018	0.4395	4.9062	3.9036	8.2100e-003	0.3073	0.2089	0.5162	0.1159	0.1937	0.3096	0.0000	727.9969	727.9969	0.0980	0.0000	730.0555
2019	0.1007	0.4908	0.5079	9.1000e-004	0.0187	0.0279	0.0466	5.0200e-003	0.0262	0.0312	0.0000	75.3758	75.3758	0.0143	0.0000	75.6766
Total	**0.5402**	**5.3969**	**4.4116**	**9.1200e-003**	**0.3260**	**0.2368**	**0.5628**	**0.1210**	**0.2198**	**0.3408**	**0.0000**	**803.3728**	**803.3728**	**0.1124**	**0.0000**	**805.7321**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**40.21**	**0.00**	**28.03**	**45.03**	**0.00**	**22.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2018	6/29/2018	5	87	
2	Site Preparation	Site Preparation	7/2/2018	7/6/2018	5	5	
3	Grading	Grading	7/9/2018	11/9/2018	5	90	
4	Building Construction	Building Construction	11/12/2018	2/12/2019	5	67	
5	Paving	Paving	2/13/2019	3/8/2019	5	18	
6	Architectural Coating	Architectural Coating	3/11/2019	3/29/2019	5	15	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,025; Non-Residential Outdoor: 11,200 (Architectural Coating – sqft)

OffRoad Equipment

3.0 Construction Detail

Construction Phase

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	846.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	5,500.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	75.00	29.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Fugitive Dust					0.0915	0.0000	0.0915	0.0139	0.0000	0.0139	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1549	1.6022	1.3800	1.7400e-003		0.0787	0.0787		0.0733	0.0733	0.0000	157.1922	157.1922	0.0435	0.0000	158.1050
Total	**0.1549**	**1.6022**	**1.3800**	**1.7400e-003**	**0.0915**	**0.0787**	**0.1702**	**0.0139**	**0.0733**	**0.0872**	**0.0000**	**157.1922**	**157.1922**	**0.0435**	**0.0000**	**158.1050**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0107	0.1806	0.1149	5.5000e-004	0.0127	2.7900e-003	0.0155	3.4700e-003	2.5700e-003	6.0400e-003	0.0000	48.3762	48.3762	3.6000e-004	0.0000	48.3837
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2900e-003	3.4200e-003	0.0355	9.0000e-005	7.1500e-003	6.0000e-005	7.2100e-003	1.9000e-003	6.0000e-005	1.9600e-003	0.0000	6.4695	6.4695	3.4000e-004	0.0000	6.4766
Total	**0.0130**	**0.1840**	**0.1504**	**6.4000e-004**	**0.0198**	**2.8500e-003**	**0.0227**	**5.3700e-003**	**2.6300e-003**	**8.0000e-003**	**0.0000**	**54.8456**	**54.8456**	**7.0000e-004**	**0.0000**	**54.8603**

Mitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Fugitive Dust					0.0412	0.0000	0.0412	6.2400e-003	0.0000	6.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1549	1.6022	1.3800	1.7400e-003		0.0787	0.0787		0.0733	0.0733	0.0000	157.1921	157.1921	0.0435	0.0000	158.1048
Total	**0.1549**	**1.6022**	**1.3800**	**1.7400e-003**	**0.0412**	**0.0787**	**0.1199**	**6.2400e-003**	**0.0733**	**0.0796**	**0.0000**	**157.1921**	**157.1921**	**0.0435**	**0.0000**	**158.1048**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0107	0.1806	0.1149	5.5000e-004	0.0127	2.7900e-003	0.0155	3.4700e-003	2.5700e-003	6.0400e-003	0.0000	48.3762	48.3762	3.6000e-004	0.0000	48.3837
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2900e-003	3.4200e-003	0.0355	9.0000e-005	7.1500e-003	6.0000e-005	7.2100e-003	1.9000e-003	6.0000e-005	1.9600e-003	0.0000	6.4695	6.4695	3.4000e-004	0.0000	6.4766
Total	**0.0130**	**0.1840**	**0.1504**	**6.4000e-004**	**0.0198**	**2.8500e-003**	**0.0227**	**5.3700e-003**	**2.6300e-003**	**8.0000e-003**	**0.0000**	**54.8456**	**54.8456**	**7.0000e-004**	**0.0000**	**54.8603**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Fugitive Dust					0.0301	0.0000	0.0301	0.0166	0.0000	0.0166	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3800e-003	0.0782	0.0623	7.0000e-005		4.1000e-003	4.1000e-003		3.7700e-003	3.7700e-003	0.0000	6.1933	6.1933	1.9300e-003	0.0000	6.2338
Total	**7.3800e-003**	**0.0782**	**0.0623**	**7.0000e-005**	**0.0301**	**4.1000e-003**	**0.0342**	**0.0166**	**3.7700e-003**	**0.0203**	**0.0000**	**6.1933**	**6.1933**	**1.9300e-003**	**0.0000**	**6.2338**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.7000e-004	1.7700e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3222	0.3222	2.0000e-005	0.0000	0.3226
Total	**1.1000e-004**	**1.7000e-004**	**1.7700e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3222**	**0.3222**	**2.0000e-005**	**0.0000**	**0.3226**

Mitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Fugitive Dust					0.0136	0.0000	0.0136	7.4500e-003	0.0000	7.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3800e-003	0.0782	0.0623	7.0000e-005		4.1000e-003	4.1000e-003		3.7700e-003	3.7700e-003	0.0000	6.1933	6.1933	1.9300e-003	0.0000	6.2338
Total	**7.3800e-003**	**0.0782**	**0.0623**	**7.0000e-005**	**0.0136**	**4.1000e-003**	**0.0177**	**7.4500e-003**	**3.7700e-003**	**0.0112**	**0.0000**	**6.1933**	**6.1933**	**1.9300e-003**	**0.0000**	**6.2338**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.7000e-004	1.7700e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3222	0.3222	2.0000e-005	0.0000	0.3226
Total	**1.1000e-004**	**1.7000e-004**	**1.7700e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3222**	**0.3222**	**2.0000e-005**	**0.0000**	**0.3226**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Fugitive Dust					0.2769	0.0000	0.2769	0.1498	0.0000	0.1498	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1351	1.3982	1.0799	1.3400e-003		0.0774	0.0774		0.0712	0.0712	0.0000	122.1883	122.1883	0.0380	0.0000	122.9871
Total	**0.1351**	**1.3982**	**1.0799**	**1.3400e-003**	**0.2769**	**0.0774**	**0.3543**	**0.1498**	**0.0712**	**0.2210**	**0.0000**	**122.1883**	**122.1883**	**0.0380**	**0.0000**	**122.9871**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0698	1.1742	0.7470	3.5500e-003	0.0824	0.0182	0.1005	0.0226	0.0167	0.0393	0.0000	314.5023	314.5023	2.3200e-003	0.0000	314.5510
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3700e-003	3.5400e-003	0.0367	9.0000e-005	7.4000e-003	7.0000e-005	7.4600e-003	1.9600e-003	6.0000e-005	2.0300e-003	0.0000	6.6926	6.6926	3.5000e-004	0.0000	6.6999
Total	**0.0722**	**1.1777**	**0.7838**	**3.6400e-003**	**0.0898**	**0.0182**	**0.1080**	**0.0246**	**0.0168**	**0.0413**	**0.0000**	**321.1948**	**321.1948**	**2.6700e-003**	**0.0000**	**321.2510**

Mitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Fugitive Dust					0.1246	0.0000	0.1246	0.0674	0.0000	0.0674	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1351	1.3982	1.0799	1.3400e-003		0.0774	0.0774		0.0712	0.0712	0.0000	122.1881	122.1881	0.0380	0.0000	122.9870
Total	**0.1351**	**1.3982**	**1.0799**	**1.3400e-003**	**0.1246**	**0.0774**	**0.2020**	**0.0674**	**0.0712**	**0.1386**	**0.0000**	**122.1881**	**122.1881**	**0.0380**	**0.0000**	**122.9870**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0698	1.1742	0.7470	3.5500e-003	0.0824	0.0182	0.1005	0.0226	0.0167	0.0393	0.0000	314.5023	314.5023	2.3200e-003	0.0000	314.5510
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3700e-003	3.5400e-003	0.0367	9.0000e-005	7.4000e-003	7.0000e-005	7.4600e-003	1.9600e-003	6.0000e-005	2.0300e-003	0.0000	6.6926	6.6926	3.5000e-004	0.0000	6.6999
Total	**0.0722**	**1.1777**	**0.7838**	**3.6400e-003**	**0.0898**	**0.0182**	**0.1080**	**0.0246**	**0.0168**	**0.0413**	**0.0000**	**321.1948**	**321.1948**	**2.6700e-003**	**0.0000**	**321.2510**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Off-Road	0.0480	0.4187	0.3156	4.8000e-004		0.0269	0.0269		0.0253	0.0253	0.0000	42.6185	42.6185	0.0104	0.0000	42.8376
Total	**0.0480**	**0.4187**	**0.3156**	**4.8000e-004**		**0.0269**	**0.0269**		**0.0253**	**0.0253**	**0.0000**	**42.6185**	**42.6185**	**0.0104**	**0.0000**	**42.8376**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0200e-003	0.0400	0.0564	1.1000e-004	3.2000e-003	6.0000e-004	3.8100e-003	9.1000e-004	5.5000e-004	1.4700e-003	0.0000	10.0572	10.0572	7.0000e-005	0.0000	10.0588
Worker	4.7400e-003	7.0700e-003	0.0735	1.9000e-004	0.0148	1.3000e-004	0.0149	3.9300e-003	1.2000e-004	4.0500e-003	0.0000	13.3851	13.3851	7.0000e-004	0.0000	13.3999
Total	**8.7600e-003**	**0.0471**	**0.1298**	**3.0000e-004**	**0.0180**	**7.3000e-004**	**0.0187**	**4.8400e-003**	**6.7000e-004**	**5.5200e-003**	**0.0000**	**23.4423**	**23.4423**	**7.7000e-004**	**0.0000**	**23.4586**

Mitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Off-Road	0.0480	0.4187	0.3156	4.8000e-004		0.0269	0.0269		0.0253	0.0253	0.0000	42.6185	42.6185	0.0104	0.0000	42.8375
Total	**0.0480**	**0.4187**	**0.3156**	**4.8000e-004**		**0.0269**	**0.0269**		**0.0253**	**0.0253**	**0.0000**	**42.6185**	**42.6185**	**0.0104**	**0.0000**	**42.8375**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0200e-003	0.0400	0.0564	1.1000e-004	3.2000e-003	6.0000e-004	3.8100e-003	9.1000e-004	5.5000e-004	1.4700e-003	0.0000	10.0572	10.0572	7.0000e-005	0.0000	10.0588
Worker	4.7400e-003	7.0700e-003	0.0735	1.9000e-004	0.0148	1.3000e-004	0.0149	3.9300e-003	1.2000e-004	4.0500e-003	0.0000	13.3851	13.3851	7.0000e-004	0.0000	13.3999
Total	**8.7600e-003**	**0.0471**	**0.1298**	**3.0000e-004**	**0.0180**	**7.3000e-004**	**0.0187**	**4.8400e-003**	**6.7000e-004**	**5.5200e-003**	**0.0000**	**23.4423**	**23.4423**	**7.7000e-004**	**0.0000**	**23.4586**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Off-Road	0.0365	0.3250	0.2654	4.2000e-004		0.0199	0.0199		0.0187	0.0187	0.0000	36.2890	36.2890	8.8300e-003	0.0000	36.4744
Total	**0.0365**	**0.3250**	**0.2654**	**4.2000e-004**		**0.0199**	**0.0199**		**0.0187**	**0.0187**	**0.0000**	**36.2890**	**36.2890**	**8.8300e-003**	**0.0000**	**36.4744**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2800e-003	0.0318	0.0469	1.0000e-004	2.7600e-003	4.9000e-004	3.2500e-003	7.9000e-004	4.5000e-004	1.2400e-003	0.0000	8.4826	8.4826	6.0000e-005	0.0000	8.4839
Worker	3.7400e-003	5.5800e-003	0.0580	1.6000e-004	0.0127	1.1000e-004	0.0129	3.3800e-003	1.0000e-004	3.4900e-003	0.0000	11.0739	11.0739	5.7000e-004	0.0000	11.0858
Total	**7.0200e-003**	**0.0373**	**0.1049**	**2.6000e-004**	**0.0155**	**6.0000e-004**	**0.0161**	**4.1700e-003**	**5.5000e-004**	**4.7300e-003**	**0.0000**	**19.5565**	**19.5565**	**6.3000e-004**	**0.0000**	**19.5697**

Mitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Off-Road	0.0365	0.3250	0.2654	4.2000e-004		0.0199	0.0199		0.0187	0.0187	0.0000	36.2890	36.2890	8.8300e-003	0.0000	36.4744
Total	**0.0365**	**0.3250**	**0.2654**	**4.2000e-004**		**0.0199**	**0.0199**		**0.0187**	**0.0187**	**0.0000**	**36.2890**	**36.2890**	**8.8300e-003**	**0.0000**	**36.4744**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2800e-003	0.0318	0.0469	1.0000e-004	2.7600e-003	4.9000e-004	3.2500e-003	7.9000e-004	4.5000e-004	1.2400e-003	0.0000	8.4826	8.4826	6.0000e-005	0.0000	8.4839
Worker	3.7400e-003	5.5800e-003	0.0580	1.6000e-004	0.0127	1.1000e-004	0.0129	3.3800e-003	1.0000e-004	3.4900e-003	0.0000	11.0739	11.0739	5.7000e-004	0.0000	11.0858
Total	**7.0200e-003**	**0.0373**	**0.1049**	**2.6000e-004**	**0.0155**	**6.0000e-004**	**0.0161**	**4.1700e-003**	**5.5000e-004**	**4.7300e-003**	**0.0000**	**19.5565**	**19.5565**	**6.3000e-004**	**0.0000**	**19.5697**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Off-Road	0.0113	0.1133	0.1093	1.7000e-004		6.4000e-003	6.4000e-003		5.9000e-003	5.9000e-003	0.0000	14.8291	14.8291	4.5600e-003	0.0000	14.9248
Paving	5.2900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0166**	**0.1133**	**0.1093**	**1.7000e-004**		**6.4000e-003**	**6.4000e-003**		**5.9000e-003**	**5.9000e-003**	**0.0000**	**14.8291**	**14.8291**	**4.5600e-003**	**0.0000**	**14.9248**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	8.6000e-004	8.9700e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.7147	1.7147	9.0000e-005	0.0000	1.7165
Total	**5.8000e-004**	**8.6000e-004**	**8.9700e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**2.0000e-005**	**5.4000e-004**	**0.0000**	**1.7147**	**1.7147**	**9.0000e-005**	**0.0000**	**1.7165**

Mitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Off-Road	0.0113	0.1133	0.1093	1.7000e-004		6.4000e-003	6.4000e-003		5.9000e-003	5.9000e-003	0.0000	14.8290	14.8290	4.5600e-003	0.0000	14.9248
Paving	5.2900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0166**	**0.1133**	**0.1093**	**1.7000e-004**		**6.4000e-003**	**6.4000e-003**		**5.9000e-003**	**5.9000e-003**	**0.0000**	**14.8290**	**14.8290**	**4.5600e-003**	**0.0000**	**14.9248**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	8.6000e-004	8.9700e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.7147	1.7147	9.0000e-005	0.0000	1.7165
Total	**5.8000e-004**	**8.6000e-004**	**8.9700e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**2.0000e-005**	**5.4000e-004**	**0.0000**	**1.7147**	**1.7147**	**9.0000e-005**	**0.0000**	**1.7165**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Archit. Coating	0.0377					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-003	0.0138	0.0138	2.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	1.9149	1.9149	1.6000e-004	0.0000	1.9183
Total	**0.0397**	**0.0138**	**0.0138**	**2.0000e-005**		**9.7000e-004**	**9.7000e-004**		**9.7000e-004**	**9.7000e-004**	**0.0000**	**1.9149**	**1.9149**	**1.6000e-004**	**0.0000**	**1.9183**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	5.4000e-004	5.6100e-003	2.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0717	1.0717	5.0000e-005	0.0000	1.0728
Total	**3.6000e-004**	**5.4000e-004**	**5.6100e-003**	**2.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0717**	**1.0717**	**5.0000e-005**	**0.0000**	**1.0728**

Mitigated Construction On-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Archit. Coating	0.0377					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-003	0.0138	0.0138	2.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	1.9149	1.9149	1.6000e-004	0.0000	1.9183
Total	**0.0397**	**0.0138**	**0.0138**	**2.0000e-005**		**9.7000e-004**	**9.7000e-004**		**9.7000e-004**	**9.7000e-004**	**0.0000**	**1.9149**	**1.9149**	**1.6000e-004**	**0.0000**	**1.9183**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	5.4000e-004	5.6100e-003	2.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0717	1.0717	5.0000e-005	0.0000	1.0728
Total	**3.6000e-004**	**5.4000e-004**	**5.6100e-003**	**2.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0717**	**1.0717**	**5.0000e-005**	**0.0000**	**1.0728**

LAWA SAAP

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.70	1000sqft	0.06	2,700.00	0
Other Asphalt Surfaces	4.04	Acre	4.04	175,982.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

For the purposes of CalEEMod model output, unmitigated results assume no control measures are applied; mitigated results assume application of emission reduction measures required by SCAQMD, including compliance with Rule 403 for fugitive dust control.

Project Characteristics -

Land Use - Building sq ft based on two 350 sq ft guard shacks plus 2,000 sq ft assumed for AA Engineering Building and AA OSF structure exterior walls.

Construction Phase - Demolition/construction activities to be coordinated to not affect airport/aircraft operations. Grading phase includes import/export of topsoil.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment estimate is between 3 acre site default and 5 acre site default

Trips and VMT - Hauling trip length assumes 35 miles to Scholl Canyon Landfill. Soil hauling trips assume average 12 cy per load.

Demolition - Demolition of CAL GO Building (155,500 sq ft) + 20% to account for pedestrian bridge and ancillary structures.

Grading - Assumes site acreage to 5 ft depth.

Architectural Coating - Areas calculated from default equations: Interior area = 2 x floor area x 75%. Exterior area = 2 x floor area x 25%. Traffic coatings = Lot area x 6%. Exterior VOC assumes Rule 1113 limit of 100 g/l for traffic coatings.

Area Coating - Default calculations.

Construction Off-road Equipment Mitigation -

Area Mitigation - SCAQMD Rule 1113 limit of 100 g/l for traffic coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	89,341.00	11,200.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	268,024.00	2,025.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_Nonresidential_Interior	268023	2025
tblConstructionPhase	NumDays	18.00	15.00
tblConstructionPhase	NumDays	230.00	67.00
tblConstructionPhase	NumDays	20.00	87.00
tblConstructionPhase	NumDays	8.00	90.00
tblConstructionPhase	PhaseStartDate	3/9/2019	3/11/2019
tblConstructionPhase	PhaseStartDate	11/10/2018	11/12/2018
tblConstructionPhase	PhaseStartDate	7/7/2018	7/9/2018

tblConstructionPhase	PhaseStartDate	6/30/2018	7/2/2018
tblEnergyUse	LightingElect	4.29	4.92
tblEnergyUse	NT24E	4.62	4.94
tblEnergyUse	NT24NG	0.39	0.55
tblEnergyUse	T24E	5.62	5.76
tblEnergyUse	T24NG	10.54	9.04
tblGrading	AcresOfGrading	45.00	4.00
tblGrading	MaterialExported	0.00	33,000.00
tblGrading	MaterialImported	0.00	33,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripNumber	8,250.00	5,500.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	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/day										lb/day					
2018	4.5750	55.8690	39.9563	0.1107	12.1895	2.1249	13.8298	6.6590	1.9549	8.1681	0.0000	10,872.4408	10,872.4408	1.1191	0.0000	10,895.9415
2019	5.3412	23.2439	23.6020	0.0440	1.0193	1.3239	2.3432	0.2738	1.2440	1.5179	0.0000	4,007.4583	4,007.4583	0.6726	0.0000	4,021.5825
Total	**9.9163**	**79.1129**	**63.5583**	**0.1547**	**13.2088**	**3.4487**	**16.1730**	**6.9328**	**3.1989**	**9.6860**	**0.0000**	**14,879.8990**	**14,879.8990**	**1.7917**	**0.0000**	**14,917.5240**

Mitigated Construction

	ROG	NOx	CO	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/day										lb/day					
2018	4.5750	55.8690	39.9563	0.1107	5.5652	2.1249	7.2055	3.0177	1.9549	4.5268	0.0000	10,872.4408	10,872.4408	1.1191	0.0000	10,895.9415
2019	5.3412	23.2439	23.6020	0.0440	1.0193	1.3239	2.3432	0.2738	1.2440	1.5179	0.0000	4,007.4583	4,007.4583	0.6726	0.0000	4,021.5825
Total	**9.9163**	**79.1129**	**63.5583**	**0.1547**	**6.5845**	**3.4487**	**9.5487**	**3.2916**	**3.1989**	**6.0447**	**0.0000**	**14,879.8990**	**14,879.8990**	**1.7917**	**0.0000**	**14,917.5240**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**50.15**	**0.00**	**40.96**	**52.52**	**0.00**	**37.59**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2018	6/29/2018	5	87	
2	Site Preparation	Site Preparation	7/2/2018	7/6/2018	5	5	
3	Grading	Grading	7/9/2018	11/9/2018	5	90	
4	Building Construction	Building Construction	11/12/2018	2/12/2019	5	67	
5	Paving	Paving	2/13/2019	3/8/2019	5	18	
6	Architectural Coating	Architectural Coating	3/11/2019	3/29/2019	5	15	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,025; Non-Residential Outdoor: 11,200 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	846.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	5,500.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	75.00	29.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					2.1045	0.0000	2.1045	0.3186	0.0000	0.3186			0.0000			0.0000
Off-Road	3.5606	36.8310	31.7250	0.0399		1.8090	1.8090		1.6856	1.6856		3,983.3282	3,983.3282	1.1015		4,006.4585
Total	**3.5606**	**36.8310**	**31.7250**	**0.0399**	**2.1045**	**1.8090**	**3.9134**	**0.3186**	**1.6856**	**2.0042**		**3,983.3282**	**3,983.3282**	**1.1015**		**4,006.4585**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.2416	3.9351	2.4029	0.0125	0.2963	0.0642	0.3605	0.0811	0.0590	0.1402		1,226.5748	1,226.5748	9.0200e-003		1,226.7642
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0541	0.0690	0.8567	2.1800e-003	0.1677	1.4700e-003	0.1691	0.0445	1.3600e-003	0.0458		170.9604	170.9604	8.6200e-003		171.1413
Total	**0.2956**	**4.0041**	**3.2596**	**0.0147**	**0.4640**	**0.0656**	**0.5296**	**0.1256**	**0.0604**	**0.1860**		**1,397.5352**	**1,397.5352**	**0.0176**		**1,397.9055**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					0.9470	0.0000	0.9470	0.1434	0.0000	0.1434			0.0000			0.0000
Off-Road	3.5606	36.8310	31.7250	0.0399		1.8090	1.8090		1.6856	1.6856	0.0000	3,983.3282	3,983.3282	1.1015		4,006.4585
Total	**3.5606**	**36.8310**	**31.7250**	**0.0399**	**0.9470**	**1.8090**	**2.7560**	**0.1434**	**1.6856**	**1.8290**	**0.0000**	**3,983.3282**	**3,983.3282**	**1.1015**		**4,006.4585**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.2416	3.9351	2.4029	0.0125	0.2963	0.0642	0.3605	0.0811	0.0590	0.1402		1,226.5748	1,226.5748	9.0200e-003		1,226.7642
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0541	0.0690	0.8567	2.1800e-003	0.1677	1.4700e-003	0.1691	0.0445	1.3600e-003	0.0458		170.9604	170.9604	8.6200e-003		171.1413
Total	**0.2956**	**4.0041**	**3.2596**	**0.0147**	**0.4640**	**0.0656**	**0.5296**	**0.1256**	**0.0604**	**0.1860**		**1,397.5352**	**1,397.5352**	**0.0176**		**1,397.9055**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	2.9501	31.2824	24.9353	0.0271		1.6390	1.6390		1.5079	1.5079		2,730.7741	2,730.7741	0.8501		2,748.6268
Total	**2.9501**	**31.2824**	**24.9353**	**0.0271**	**12.0442**	**1.6390**	**13.6832**	**6.6205**	**1.5079**	**8.1284**		**2,730.7741**	**2,730.7741**	**0.8501**		**2,748.6268**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0468	0.0598	0.7424	1.8900e-003	0.1453	1.2700e-003	0.1466	0.0385	1.1800e-003	0.0397		148.1657	148.1657	7.4700e-003		148.3225
Total	**0.0468**	**0.0598**	**0.7424**	**1.8900e-003**	**0.1453**	**1.2700e-003**	**0.1466**	**0.0385**	**1.1800e-003**	**0.0397**		**148.1657**	**148.1657**	**7.4700e-003**		**148.3225**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					5.4199	0.0000	5.4199	2.9792	0.0000	2.9792			0.0000			0.0000
Off-Road	2.9501	31.2824	24.9353	0.0271		1.6390	1.6390		1.5079	1.5079	0.0000	2,730.7741	2,730.7741	0.8501		2,748.6267
Total	**2.9501**	**31.2824**	**24.9353**	**0.0271**	**5.4199**	**1.6390**	**7.0589**	**2.9792**	**1.5079**	**4.4871**	**0.0000**	**2,730.7741**	**2,730.7741**	**0.8501**		**2,748.6267**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0468	0.0598	0.7424	1.8900e-003	0.1453	1.2700e-003	0.1466	0.0385	1.1800e-003	0.0397		148.1657	148.1657	7.4700e-003		148.3225
Total	**0.0468**	**0.0598**	**0.7424**	**1.8900e-003**	**0.1453**	**1.2700e-003**	**0.1466**	**0.0385**	**1.1800e-003**	**0.0397**		**148.1657**	**148.1657**	**7.4700e-003**		**148.3225**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					6.1522	0.0000	6.1522	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	3.0028	31.0702	23.9988	0.0297		1.7201	1.7201		1.5825	1.5825		2,993.1005	2,993.1005	0.9318		3,012.6681
Total	**3.0028**	**31.0702**	**23.9988**	**0.0297**	**6.1522**	**1.7201**	**7.8722**	**3.3279**	**1.5825**	**4.9104**		**2,993.1005**	**2,993.1005**	**0.9318**		**3,012.6681**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	1.5182	24.7298	15.1009	0.0788	1.8621	0.4033	2.2654	0.5098	0.3710	0.8808		7,708.3800	7,708.3800	0.0567		7,709.5704
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0541	0.0690	0.8567	2.1800e-003	0.1677	1.4700e-003	0.1691	0.0445	1.3600e-003	0.0458		170.9604	170.9604	8.6200e-003		171.1413
Total	**1.5722**	**24.7988**	**15.9575**	**0.0810**	**2.0298**	**0.4048**	**2.4345**	**0.5543**	**0.3724**	**0.9267**		**7,879.3403**	**7,879.3403**	**0.0653**		**7,880.7116**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					2.7685	0.0000	2.7685	1.4975	0.0000	1.4975			0.0000			0.0000
Off-Road	3.0028	31.0702	23.9988	0.0297		1.7201	1.7201		1.5825	1.5825	0.0000	2,993.1005	2,993.1005	0.9318		3,012.6681
Total	**3.0028**	**31.0702**	**23.9988**	**0.0297**	**2.7685**	**1.7201**	**4.4886**	**1.4975**	**1.5825**	**3.0800**	**0.0000**	**2,993.1005**	**2,993.1005**	**0.9318**		**3,012.6681**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	1.5182	24.7298	15.1009	0.0788	1.8621	0.4033	2.2654	0.5098	0.3710	0.8808		7,708.3800	7,708.3800	0.0567		7,709.5704
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0541	0.0690	0.8567	2.1800e-003	0.1677	1.4700e-003	0.1691	0.0445	1.3600e-003	0.0458		170.9604	170.9604	8.6200e-003		171.1413
Total	**1.5722**	**24.7988**	**15.9575**	**0.0810**	**2.0298**	**0.4048**	**2.4345**	**0.5543**	**0.3724**	**0.9267**		**7,879.3403**	**7,879.3403**	**0.0653**		**7,880.7116**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2105	2.1270	2.6442	6.3600e-003	0.1810	0.0333	0.2143	0.0515	0.0306	0.0821		618.0616	618.0616	4.5100e-003		618.1563
Worker	0.2703	0.3451	4.2833	0.0109	0.8383	7.3600e-003	0.8457	0.2223	6.8000e-003	0.2291		854.8018	854.8018	0.0431		855.7064
Total	**0.4807**	**2.4722**	**6.9275**	**0.0173**	**1.0193**	**0.0407**	**1.0599**	**0.2738**	**0.0374**	**0.3113**		**1,472.8634**	**1,472.8634**	**0.0476**		**1,473.8627**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2105	2.1270	2.6442	6.3600e-003	0.1810	0.0333	0.2143	0.0515	0.0306	0.0821		618.0616	618.0616	4.5100e-003		618.1563
Worker	0.2703	0.3451	4.2833	0.0109	0.8383	7.3600e-003	0.8457	0.2223	6.8000e-003	0.2291		854.8018	854.8018	0.0431		855.7064
Total	**0.4807**	**2.4722**	**6.9275**	**0.0173**	**1.0193**	**0.0407**	**1.0599**	**0.2738**	**0.0374**	**0.3113**		**1,472.8634**	**1,472.8634**	**0.0476**		**1,473.8627**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1998	1.9624	2.5484	6.3300e-003	0.1810	0.0317	0.2126	0.0515	0.0291	0.0806		605.3861	605.3861	4.4100e-003		605.4788
Worker	0.2483	0.3164	3.9333	0.0109	0.8383	7.1700e-003	0.8455	0.2223	6.6500e-003	0.2290		821.3103	821.3103	0.0403		822.1558
Total	**0.4481**	**2.2789**	**6.4817**	**0.0172**	**1.0193**	**0.0388**	**1.0581**	**0.2738**	**0.0358**	**0.3096**		**1,426.6965**	**1,426.6965**	**0.0447**		**1,427.6346**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1998	1.9624	2.5484	6.3300e-003	0.1810	0.0317	0.2126	0.0515	0.0291	0.0806		605.3861	605.3861	4.4100e-003		605.4788
Worker	0.2483	0.3164	3.9333	0.0109	0.8383	7.1700e-003	0.8455	0.2223	6.6500e-003	0.2290		821.3103	821.3103	0.0403		822.1558
Total	**0.4481**	**2.2789**	**6.4817**	**0.0172**	**1.0193**	**0.0388**	**1.0581**	**0.2738**	**0.0358**	**0.3096**		**1,426.6965**	**1,426.6965**	**0.0447**		**1,427.6346**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	1.2520	12.5889	12.1441	0.0187		0.7111	0.7111		0.6560	0.6560		1,816.2490	1,816.2490	0.5585		1,827.9782
Paving	0.5880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8400**	**12.5889**	**12.1441**	**0.0187**		**0.7111**	**0.7111**		**0.6560**	**0.6560**		**1,816.2490**	**1,816.2490**	**0.5585**		**1,827.9782**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0662	0.0844	1.0489	2.8900e-003	0.2236	1.9100e-003	0.2255	0.0593	1.7700e-003	0.0611		219.0161	219.0161	0.0107		219.2416
Total	**0.0662**	**0.0844**	**1.0489**	**2.8900e-003**	**0.2236**	**1.9100e-003**	**0.2255**	**0.0593**	**1.7700e-003**	**0.0611**		**219.0161**	**219.0161**	**0.0107**		**219.2416**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	1.2520	12.5889	12.1441	0.0187		0.7111	0.7111		0.6560	0.6560	0.0000	1,816.2490	1,816.2490	0.5585		1,827.9782
Paving	0.5880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8400**	**12.5889**	**12.1441**	**0.0187**		**0.7111**	**0.7111**		**0.6560**	**0.6560**	**0.0000**	**1,816.2490**	**1,816.2490**	**0.5585**		**1,827.9782**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0662	0.0844	1.0489	2.8900e-003	0.2236	1.9100e-003	0.2255	0.0593	1.7700e-003	0.0611		219.0161	219.0161	0.0107		219.2416
Total	**0.0662**	**0.0844**	**1.0489**	**2.8900e-003**	**0.2236**	**1.9100e-003**	**0.2255**	**0.0593**	**1.7700e-003**	**0.0611**		**219.0161**	**219.0161**	**0.0107**		**219.2416**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Archit. Coating	5.0251					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**5.2916**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0497	0.0633	0.7867	2.1700e-003	0.1677	1.4300e-003	0.1691	0.0445	1.3300e-003	0.0458		164.2621	164.2621	8.0500e-003		164.4312
Total	**0.0497**	**0.0633**	**0.7867**	**2.1700e-003**	**0.1677**	**1.4300e-003**	**0.1691**	**0.0445**	**1.3300e-003**	**0.0458**		**164.2621**	**164.2621**	**8.0500e-003**		**164.4312**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Archit. Coating	5.0251					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**5.2916**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0497	0.0633	0.7867	2.1700e-003	0.1677	1.4300e-003	0.1691	0.0445	1.3300e-003	0.0458		164.2621	164.2621	8.0500e-003		164.4312
Total	**0.0497**	**0.0633**	**0.7867**	**2.1700e-003**	**0.1677**	**1.4300e-003**	**0.1691**	**0.0445**	**1.3300e-003**	**0.0458**		**164.2621**	**164.2621**	**8.0500e-003**		**164.4312**

LAWA SAAP

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.70	1000sqft	0.06	2,700.00	0
Other Asphalt Surfaces	4.04	Acre	4.04	175,982.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

For the purposes of CalEEMod model output, unmitigated results assume no control measures are applied; mitigated results assume application of emission reduction measures required by SCAQMD, including compliance with Rule 403 for fugitive dust control.

Project Characteristics -

Land Use - Building sq ft based on two 350 sq ft guard shacks plus 2,000 sq ft assumed for AA Engineering Building and AA OSF structure exterior walls.

Construction Phase - Demolition/construction activities to be coordinated to not affect airport/aircraft operations. Grading phase includes import/export of topsoil.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment estimate is between 3 acre site default and 5 acre site default

Trips and VMT - Hauling trip length assumes 35 miles to Scholl Canyon Landfill. Soil hauling trips assume average 12 cy per load.

Demolition - Demolition of CAL GO Building (155,500 sq ft) + 20% to account for pedestrian bridge and ancillary structures.

Grading - Assumes site acreage to 5 ft depth.

Architectural Coating - Areas calculated from default equations: Interior area = 2 x floor area x 75%. Exterior area = 2 x floor area x 25%. Traffic coatings = Lot area x 6%. Exterior VOC assumes Rule 1113 limit of 100 g/l for traffic coatings.

Area Coating - Default calculations.

Construction Off-road Equipment Mitigation -

Area Mitigation - SCAQMD Rule 1113 limit of 100 g/l for traffic coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	89,341.00	11,200.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	268,024.00	2,025.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_Nonresidential_Interior	268023	2025
tblConstructionPhase	NumDays	18.00	15.00
tblConstructionPhase	NumDays	230.00	67.00
tblConstructionPhase	NumDays	20.00	87.00
tblConstructionPhase	NumDays	8.00	90.00
tblConstructionPhase	PhaseStartDate	3/9/2019	3/11/2019
tblConstructionPhase	PhaseStartDate	11/10/2018	11/12/2018
tblConstructionPhase	PhaseStartDate	7/7/2018	7/9/2018

tblConstructionPhase	PhaseStartDate	6/30/2018	7/2/2018
tblEnergyUse	LightingElect	4.29	4.92
tblEnergyUse	NT24E	4.62	4.94
tblEnergyUse	NT24NG	0.39	0.55
tblEnergyUse	T24E	5.62	5.76
tblEnergyUse	T24NG	10.54	9.04
tblGrading	AcresOfGrading	45.00	4.00
tblGrading	MaterialExported	0.00	33,000.00
tblGrading	MaterialImported	0.00	33,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripLength	20.00	35.00
tblTripsAndVMT	HaulingTripNumber	8,250.00	5,500.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	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/day										lb/day					
2018	4.6261	56.7866	41.8122	0.1105	12.1895	2.1254	13.8298	6.6590	1.9553	8.1681	0.0000	10,852.3599	10,852.3599	1.1192	0.0000	10,875.8621
2019	5.3430	23.3245	23.9424	0.0433	1.0193	1.3242	2.3435	0.2738	1.2443	1.5182	0.0000	3,956.1086	3,956.1086	0.6727	0.0000	3,970.2359
Total	**9.9691**	**80.1111**	**65.7546**	**0.1539**	**13.2088**	**3.4495**	**16.1733**	**6.9328**	**3.1997**	**9.6862**	**0.0000**	**14,808.4685**	**14,808.4685**	**1.7919**	**0.0000**	**14,846.0980**

Mitigated Construction

	ROG	NOx	CO	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/day										lb/day					
2018	4.6261	56.7866	41.8122	0.1105	5.5652	2.1254	7.2055	3.0177	1.9553	4.5268	0.0000	10,852.3599	10,852.3599	1.1192	0.0000	10,875.8621
2019	5.3430	23.3245	23.9424	0.0433	1.0193	1.3242	2.3435	0.2738	1.2443	1.5182	0.0000	3,956.1086	3,956.1086	0.6727	0.0000	3,970.2359
Total	**9.9691**	**80.1111**	**65.7546**	**0.1539**	**6.5845**	**3.4495**	**9.5490**	**3.2916**	**3.1997**	**6.0450**	**0.0000**	**14,808.4685**	**14,808.4685**	**1.7919**	**0.0000**	**14,846.0980**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**50.15**	**0.00**	**40.96**	**52.52**	**0.00**	**37.59**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2018	6/29/2018	5	87	
2	Site Preparation	Site Preparation	7/2/2018	7/6/2018	5	5	
3	Grading	Grading	7/9/2018	11/9/2018	5	90	
4	Building Construction	Building Construction	11/12/2018	2/12/2019	5	67	
5	Paving	Paving	2/13/2019	3/8/2019	5	18	
6	Architectural Coating	Architectural Coating	3/11/2019	3/29/2019	5	15	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,025; Non-Residential Outdoor: 11,200 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	846.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	5,500.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	75.00	29.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	35.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					2.1045	0.0000	2.1045	0.3186	0.0000	0.3186			0.0000			0.0000
Off-Road	3.5606	36.8310	31.7250	0.0399		1.8090	1.8090		1.6856	1.6856		3,983.3282	3,983.3282	1.1015		4,006.4585
Total	**3.5606**	**36.8310**	**31.7250**	**0.0399**	**2.1045**	**1.8090**	**3.9134**	**0.3186**	**1.6856**	**2.0042**		**3,983.3282**	**3,983.3282**	**1.1015**		**4,006.4585**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.2494	4.0799	2.7076	0.0125	0.2963	0.0643	0.3606	0.0811	0.0591	0.1402		1,224.9105	1,224.9105	9.0900e-003		1,225.1015
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0560	0.0765	0.7976	2.0600e-003	0.1677	1.4700e-003	0.1691	0.0445	1.3600e-003	0.0458		161.3388	161.3388	8.6200e-003		161.5197
Total	**0.3054**	**4.1564**	**3.5052**	**0.0146**	**0.4640**	**0.0657**	**0.5297**	**0.1256**	**0.0605**	**0.1861**		**1,386.2493**	**1,386.2493**	**0.0177**		**1,386.6211**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					0.9470	0.0000	0.9470	0.1434	0.0000	0.1434			0.0000			0.0000
Off-Road	3.5606	36.8310	31.7250	0.0399		1.8090	1.8090		1.6856	1.6856	0.0000	3,983.3282	3,983.3282	1.1015		4,006.4585
Total	**3.5606**	**36.8310**	**31.7250**	**0.0399**	**0.9470**	**1.8090**	**2.7560**	**0.1434**	**1.6856**	**1.8290**	**0.0000**	**3,983.3282**	**3,983.3282**	**1.1015**		**4,006.4585**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.2494	4.0799	2.7076	0.0125	0.2963	0.0643	0.3606	0.0811	0.0591	0.1402		1,224.9105	1,224.9105	9.0900e-003		1,225.1015
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0560	0.0765	0.7976	2.0600e-003	0.1677	1.4700e-003	0.1691	0.0445	1.3600e-003	0.0458		161.3388	161.3388	8.6200e-003		161.5197
Total	**0.3054**	**4.1564**	**3.5052**	**0.0146**	**0.4640**	**0.0657**	**0.5297**	**0.1256**	**0.0605**	**0.1861**		**1,386.2493**	**1,386.2493**	**0.0177**		**1,386.6211**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	2.9501	31.2824	24.9353	0.0271		1.6390	1.6390		1.5079	1.5079		2,730.7741	2,730.7741	0.8501		2,748.6268
Total	**2.9501**	**31.2824**	**24.9353**	**0.0271**	**12.0442**	**1.6390**	**13.6832**	**6.6205**	**1.5079**	**8.1284**		**2,730.7741**	**2,730.7741**	**0.8501**		**2,748.6268**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0485	0.0663	0.6913	1.7800e-003	0.1453	1.2700e-003	0.1466	0.0385	1.1800e-003	0.0397		139.8269	139.8269	7.4700e-003		139.9837
Total	**0.0485**	**0.0663**	**0.6913**	**1.7800e-003**	**0.1453**	**1.2700e-003**	**0.1466**	**0.0385**	**1.1800e-003**	**0.0397**		**139.8269**	**139.8269**	**7.4700e-003**		**139.9837**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					5.4199	0.0000	5.4199	2.9792	0.0000	2.9792			0.0000			0.0000
Off-Road	2.9501	31.2824	24.9353	0.0271		1.6390	1.6390		1.5079	1.5079	0.0000	2,730.7741	2,730.7741	0.8501		2,748.6267
Total	**2.9501**	**31.2824**	**24.9353**	**0.0271**	**5.4199**	**1.6390**	**7.0589**	**2.9792**	**1.5079**	**4.4871**	**0.0000**	**2,730.7741**	**2,730.7741**	**0.8501**		**2,748.6267**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0485	0.0663	0.6913	1.7800e-003	0.1453	1.2700e-003	0.1466	0.0385	1.1800e-003	0.0397		139.8269	139.8269	7.4700e-003		139.9837
Total	**0.0485**	**0.0663**	**0.6913**	**1.7800e-003**	**0.1453**	**1.2700e-003**	**0.1466**	**0.0385**	**1.1800e-003**	**0.0397**		**139.8269**	**139.8269**	**7.4700e-003**		**139.9837**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					6.1522	0.0000	6.1522	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	3.0028	31.0702	23.9988	0.0297		1.7201	1.7201		1.5825	1.5825		2,993.1005	2,993.1005	0.9318		3,012.6681
Total	**3.0028**	**31.0702**	**23.9988**	**0.0297**	**6.1522**	**1.7201**	**7.8722**	**3.3279**	**1.5825**	**4.9104**		**2,993.1005**	**2,993.1005**	**0.9318**		**3,012.6681**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	1.5673	25.6399	17.0158	0.0788	1.8621	0.4038	2.2659	0.5098	0.3715	0.8813		7,697.9207	7,697.9207	0.0571		7,699.1207
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0560	0.0765	0.7976	2.0600e-003	0.1677	1.4700e-003	0.1691	0.0445	1.3600e-003	0.0458		161.3388	161.3388	8.6200e-003		161.5197
Total	**1.6233**	**25.7165**	**17.8134**	**0.0808**	**2.0298**	**0.4053**	**2.4351**	**0.5543**	**0.3729**	**0.9271**		**7,859.2595**	**7,859.2595**	**0.0658**		**7,860.6403**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Fugitive Dust					2.7685	0.0000	2.7685	1.4975	0.0000	1.4975			0.0000			0.0000
Off-Road	3.0028	31.0702	23.9988	0.0297		1.7201	1.7201		1.5825	1.5825	0.0000	2,993.1005	2,993.1005	0.9318		3,012.6681
Total	**3.0028**	**31.0702**	**23.9988**	**0.0297**	**2.7685**	**1.7201**	**4.4886**	**1.4975**	**1.5825**	**3.0800**	**0.0000**	**2,993.1005**	**2,993.1005**	**0.9318**		**3,012.6681**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	1.5673	25.6399	17.0158	0.0788	1.8621	0.4038	2.2659	0.5098	0.3715	0.8813		7,697.9207	7,697.9207	0.0571		7,699.1207
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0560	0.0765	0.7976	2.0600e-003	0.1677	1.4700e-003	0.1691	0.0445	1.3600e-003	0.0458		161.3388	161.3388	8.6200e-003		161.5197
Total	**1.6233**	**25.7165**	**17.8134**	**0.0808**	**2.0298**	**0.4053**	**2.4351**	**0.5543**	**0.3729**	**0.9271**		**7,859.2595**	**7,859.2595**	**0.0658**		**7,860.6403**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2302	2.1783	3.2741	6.3100e-003	0.1810	0.0336	0.2146	0.0515	0.0309	0.0824		612.9088	612.9088	4.6500e-003		613.0065
Worker	0.2799	0.3827	3.9882	0.0103	0.8383	7.3600e-003	0.8457	0.2223	6.8000e-003	0.2291		806.6938	806.6938	0.0431		807.5984
Total	**0.5101**	**2.5609**	**7.2623**	**0.0166**	**1.0193**	**0.0410**	**1.0603**	**0.2738**	**0.0377**	**0.3116**		**1,419.6026**	**1,419.6026**	**0.0477**		**1,420.6049**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2302	2.1783	3.2741	6.3100e-003	0.1810	0.0336	0.2146	0.0515	0.0309	0.0824		612.9088	612.9088	4.6500e-003		613.0065
Worker	0.2799	0.3827	3.9882	0.0103	0.8383	7.3600e-003	0.8457	0.2223	6.8000e-003	0.2291		806.6938	806.6938	0.0431		807.5984
Total	**0.5101**	**2.5609**	**7.2623**	**0.0166**	**1.0193**	**0.0410**	**1.0603**	**0.2738**	**0.0377**	**0.3116**		**1,419.6026**	**1,419.6026**	**0.0477**		**1,420.6049**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2181	2.0086	3.1706	6.2800e-003	0.1810	0.0320	0.2129	0.0515	0.0294	0.0809		600.3105	600.3105	4.5500e-003		600.4062
Worker	0.2570	0.3509	3.6515	0.0102	0.8383	7.1700e-003	0.8455	0.2223	6.6500e-003	0.2290		775.0364	775.0364	0.0403		775.8818
Total	**0.4751**	**2.3595**	**6.8221**	**0.0165**	**1.0193**	**0.0391**	**1.0584**	**0.2738**	**0.0360**	**0.3099**		**1,375.3469**	**1,375.3469**	**0.0448**		**1,376.2880**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2181	2.0086	3.1706	6.2800e-003	0.1810	0.0320	0.2129	0.0515	0.0294	0.0809		600.3105	600.3105	4.5500e-003		600.4062
Worker	0.2570	0.3509	3.6515	0.0102	0.8383	7.1700e-003	0.8455	0.2223	6.6500e-003	0.2290		775.0364	775.0364	0.0403		775.8818
Total	**0.4751**	**2.3595**	**6.8221**	**0.0165**	**1.0193**	**0.0391**	**1.0584**	**0.2738**	**0.0360**	**0.3099**		**1,375.3469**	**1,375.3469**	**0.0448**		**1,376.2880**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	1.2520	12.5889	12.1441	0.0187		0.7111	0.7111		0.6560	0.6560		1,816.2490	1,816.2490	0.5585		1,827.9782
Paving	0.5880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8400**	**12.5889**	**12.1441**	**0.0187**		**0.7111**	**0.7111**		**0.6560**	**0.6560**		**1,816.2490**	**1,816.2490**	**0.5585**		**1,827.9782**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0936	0.9737	2.7300e-003	0.2236	1.9100e-003	0.2255	0.0593	1.7700e-003	0.0611		206.6764	206.6764	0.0107		206.9018
Total	**0.0685**	**0.0936**	**0.9737**	**2.7300e-003**	**0.2236**	**1.9100e-003**	**0.2255**	**0.0593**	**1.7700e-003**	**0.0611**		**206.6764**	**206.6764**	**0.0107**		**206.9018**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Off-Road	1.2520	12.5889	12.1441	0.0187		0.7111	0.7111		0.6560	0.6560	0.0000	1,816.2490	1,816.2490	0.5585		1,827.9782
Paving	0.5880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8400**	**12.5889**	**12.1441**	**0.0187**		**0.7111**	**0.7111**		**0.6560**	**0.6560**	**0.0000**	**1,816.2490**	**1,816.2490**	**0.5585**		**1,827.9782**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0936	0.9737	2.7300e-003	0.2236	1.9100e-003	0.2255	0.0593	1.7700e-003	0.0611		206.6764	206.6764	0.0107		206.9018
Total	**0.0685**	**0.0936**	**0.9737**	**2.7300e-003**	**0.2236**	**1.9100e-003**	**0.2255**	**0.0593**	**1.7700e-003**	**0.0611**		**206.6764**	**206.6764**	**0.0107**		**206.9018**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	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/day					
Archit. Coating	5.0251					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**5.2916**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0514	0.0702	0.7303	2.0500e-003	0.1677	1.4300e-003	0.1691	0.0445	1.3300e-003	0.0458		155.0073	155.0073	8.0500e-003		155.1764
Total	**0.0514**	**0.0702**	**0.7303**	**2.0500e-003**	**0.1677**	**1.4300e-003**	**0.1691**	**0.0445**	**1.3300e-003**	**0.0458**		**155.0073**	**155.0073**	**8.0500e-003**		**155.1764**

Mitigated Construction On-Site

	ROG	NOx	CO	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/day					
Archit. Coating	5.0251					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**5.2916**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	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/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0514	0.0702	0.7303	2.0500e-003	0.1677	1.4300e-003	0.1691	0.0445	1.3300e-003	0.0458		155.0073	155.0073	8.0500e-003		155.1764
Total	**0.0514**	**0.0702**	**0.7303**	**2.0500e-003**	**0.1677**	**1.4300e-003**	**0.1691**	**0.0445**	**1.3300e-003**	**0.0458**		**155.0073**	**155.0073**	**8.0500e-003**		**155.1764**

APPENDIX A-2

Comparison of Emissions from On-Site Rock Crushing and Off-Site Hauling

Comparison of Aggregate Crushing Emissions and Aggregate Hauling Emissions

Emissions from aggregate crushing and screening were analyzed as part of the air quality analysis for the LAX SAAP Project. As stated in Section 3.0, *Project Description*, of the Draft IS, to the extent feasible and practical, existing pavement, such as asphalt and concrete, would be crushed at a location on airport property and reused onsite as aggregate or base material. However, for the purposes of the Draft IS, it was conservatively assumed that all demolished material would be exported offsite. The determination as to whether demolished pavement materials would be crushed at a location on airport property and reused onsite or exported offsite would be made by LAWA, in consultation with the selected construction contractor, based on feasibility and logistical considerations applicable at that time, including, but not limited to, the availability and location of a suitable site at LAX for the placement of a crusher, with sufficient grid-based electrical power to operate the crusher, and with sufficient space for the stockpiling of both demolished pavement rubble to be processed and processed material.

Emissions that would result if aggregate crushing were to occur at LAX (instead of the aggregate being exported offsite) were examined and are compared with hauling emissions in the table below; see the following pages for detailed calculations. Pollutants for which emissions were calculated include:

- Carbon monoxide (CO)
- Reactive organic gas (ROG)
- Nitrogen dioxide (NO_2)
- Sulfur dioxide (SO_2)
- Respirable particulate matter less than or equal to 10 µm in diameter (PM10)
- Carbon Dioxide Equivalent (CO_2e)

Comparison of Aggregate Crushing Emissions and Aggregate Hauling Emissions

Source	Total Pollutant Emissions for Reusable Material[1] (pounds, unless noted)					
	Carbon Monoxide (CO)	**Reactive Organic Gas (ROG)**	**Nitrogen Dioxide (NO_2)**	**Sulfur Dioxide (SO_2)**	**Respirable Particulate Matter (PM10)**	**Carbon Dioxide Equivalent (CO_2e) (tons)**
Aggregate Crushing Emissions[2]	46.96	16.65	171.30	0.19	47.31	13.22
Hauling Emissions	224.91	20.94	353.51	1.08	30.34	47.37
Difference Between Crushing and Hauling	-177.95	-4.29	-182.21	-0.89	16.97	-34.15

Notes:

1 Results may not add due to rounding.

2 Aggregate crushing emissions include operation of associated loading equipment.

Source: CDM Smith 2017.

As shown in the table, with the exception of PM10, emissions due to aggregate crushing would be considerably lower than emissions due to hauling. While there would be an increase in PM10 emissions were aggregate to be crushed at the airport instead of transported offsite, LAWA has Emission Reduction Credits (ERCs) specifically to offset aggregate crusher-related PM10 emissions (ERC AQ010699, AQ012812, AQ010438, and AQ010629). For these reasons, the assumption in the Draft IS that pavement removed from the project site would be hauled offsite rather than crushed onsite is a conservative assumption for the purposes of identifying air quality and greenhouse gas emissions. Moreover, under either scenario (i.e., onsite crushing or offsite hauling), project emissions would be well below SCAQMD thresholds of significance for all pollutants, and no mitigation measures are required.

LAX SAAP - Rock Crusher vs Hauling Comparison

Emissions comparison of crushing versus hauling of demolished material

Hauling of Material:	*Total Project-Related Emissions (lbs)*					
	ROG	**NOx**	**CO**	**SO2**	**PM10 Total**	**CO2e**
	20.94	353.51	224.91	1.08	30.34	104,398.15

Crushing of Material:	*Total Project-Related Emissions (lbs)*					
	ROG	**NOx**	**CO**	**SO2**	**PM10 Total**	**CO2e**
	16.65	171.30	46.96	0.19	47.31	29,140.33

Crushing minus Hauling:	*Total Project-Related Emissions (lbs)*					
	ROG	**NOx**	**CO**	**SO2**	**PM10 Total**	**CO2e**
	-4.29	-182.21	-177.95	-0.89	16.97	-75,257.82

Project-related emissions decrease for all pollutants except for PM10 when utilizing the rock crusher over off-site hauling.

LAX SAAP - Hauling Analysis

Hauling of Crushable Demolished Material

Total Emissions of Hauling Trips associated with All Demolished Material*

	ROG	NOx	CO	SO2	PM10 Total	CO2e
Total Tons (metric tons for CO2e):	0.0107	0.1806	0.1149	0.0006	0.0155	48.3837
Total Pounds:	21.40	361.20	229.80	1.10	31.00	106,667.67

** Demolished material consists of both concrete and non-concrete material. Only concrete is able to be processed in the on-site rock processor.*

Number of Hauling Trips associated with Demolished Material

Number of Trips associated with All Demolished Material:	**846**	
Depth of Crushable Material:	24	Inches
Area of Crushable Material:	19,854	Square Yards
Total Volume of Crushable Material:	**13,236**	**Cubic Yards**
Capacity of Haul Trucks:	16	Cubic Yards
Number of Trips associated with Crushable Material:	**828**	**Trips**

Total Emissions of Hauling Trips associated with Crushable Material

	ROG	NOx	CO	SO2	PM10 Total	CO2e
Total Tons (metric tons for CO2e):	0.01	0.18	0.11	0.00	0.02	47.35
Total Pounds:	20.94	353.51	224.91	1.08	30.34	104,398.15

LAX SAAP - Rock Crusher Analysis

Processing of Crushable Demolished Material

Emission Factors Associated with the Rock Processor Operations

Emissions Factors for Rock Processing	
Source	Controlled Emission Factors (lb PM10 / ton processed)
Primary Crushers	5.40E-04
Secondary Crushers	5.40E-04
Tertiary Crushers	5.40E-04
Screening	7.40E-04
Conveyor Trasfer Point 1	4.60E-05
Conveyor Trasfer Point 2	4.60E-05
Total of Rock Processor Sources:	2.45E-03

Source: AP-42 Emission Factors for Crushed Stone Processing and Pulverized Materials from Chapter 11, Table11.19.2-2 for Crushed Stone Processing and Pulverized Materials

Criteria Pollutant Emission Factors for Loaders Associated with the Rock Processor Operations

	ROG	CO	NOx	SOx	PM10
Pounds / Hour:	0.1493	0.421	1.5357	0.0017	0.0563

Source: AQMD CEQA Air Quality Handbook. Available at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/off-road-mobile-source-emission-factors

Greenhouse Gas Pollutant Emission Factors for Loaders Associated with the Rock Processor Operations

CY	Code	Equipment	Fuel	MaxHP	Activity (hr/day)	CO2e (Tons / Day)	CO2e (Pounds / Hour)
2010	2270002060	Rubber Tired Loaders	D	500	25.5	3.0216	261.2363

Source: CDM Smith, OFFROAD2007 model output

Details Associated with Rock Processor Operations

13,235.73	Cubic Yards of Crushable Demolished Material
1.2642	Tons per Cubic Yard of Material [1]
150	Tons of material processed per hour [2]
111.5	Hours of Rock Processor Operation Associated with Project Demand

1. Source: CalEEMod User Manual Appendix A: http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2, Page 11

2. Source: AP-42 Emission Factors for Crushed Stone Processing and Pulverized Materials from Chapter 11, Table11.19.2-2 for Crushed Stone Processing and Pulverized Materials

Total Emissions Associated with the Rock Processing Operations (Loaders & Processing)

	ROG	**CO**	**NOx**	**SOx**	**PM10**	**CO2e**
Total Tons (metric tons for CO2e):	0.01	0.02	0.09	0.00	0.02	14.57
Total Pounds:	16.65	46.96	171.30	0.19	47.31	29,140.33

APPENDIX A-3

Operational Emissions

LAX SAAP - Existing Generators Operational Analysis

Operational Analysis of Existing SAAP Generators

			Conversions & Assumptions
Number of Generators =	2	generators	453.592 grams per pound
Size =	10.06	horsepower	7.5 kW (10.06 hp) generator
Usage =	8760	hours of operation per year	Operates each hour of the year

Actual Emissions - Criteria Air Pollutants

Pollutant	Emission Factor	Actual Emissions	
	lb/hp-hr	Peak-day emissions (lbs/day)	Annual (tons/year) [mt for CO2]
NOx**	6.61E-03	**3.1937**	**0.5829**
CO**	5.73E-03	**2.7679**	**0.5051**
PM10**	3.31E-04	**0.1597**	**0.0291**
SO2*	2.05E-03	**0.9899**	**0.1807**
VOC*	2.51E-03	**1.2140**	**0.2216**
CO2	1.08E+00	**521.5104**	**86.3420**

Emission Factors from AP-42 & CARB Regulations - Criteria Air Pollutants

Component	lb/hp-hr*	lb/MMBtu	lb/bhp-hr**
Nitrogen oxides (NOx)	3.10E-02	4.41E+00	6.61E-03
Carbon monoxide (CO)	6.68E-03	9.50E-01	5.73E-03
Particulate matter - Total (PM10 and PM2.5)	2.20E-03	3.10E-01	3.31E-04
Sulfur dioxide (SO2)	2.05E-03	2.90E-01	-
Volatile organic compounds (VOCs)	2.51E-03	3.60E-01	-
CO2	1.08E+00	1.54E+02	-
Lead (Pb)	ND	ND	-

AP-42 Base Emissions*

AP-42 Fifth Edition - Compilation of Air Pollutant Emission Factors. Volume I: Stationary Point and Area Sources. U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. Research Triangle Park, NC. January 1995 (including Supplements A through F and Updates through April 2014). Section 3.3 - Gasoline and Diesel Industrial Engines. Available at: https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf

CARB Required Emissions**

Final Regulation Order - Amendments to the Airborne Toxic Control Measure for Stationary Compression Ignition Engines, § 93115.6 ATCM for Stationary CI Engines – Emergency Standby Diesel-Fueled CI Engine (>50 bhp) Operating Requirements and Emission Standards. California Air Resources Board. Available at: https://www.arb.ca.gov/diesel/documents/FinalReg2011.pdf

LAX SAAP - Comparison of Operational Energy Demand and GHG Emissions

Existing SAAP Component	Power Supply	Number of Units	Annual Demand (kWh)	GHG Emissions (Metric Tons)
Guard Booths	Generator			
Restrooms	Generator		131,400	
CCTV Cameras	Generator			
Sliding Gates	Grid	8	Equivalent to Project Grid Demand	
Gate Arms	Grid	8	for Sliding Gates & Gate Arms	
Total			131,400	86

Future SAAP Component	Power Supply	Number of Units	Volts	Amps	Watts	Time per Vehicle (hours)	Annual Demand (kWh)	GHG Emissions (Metric Tons)
Guard Booths	Grid							
Restrooms	Grid						131,400	
CCTV Cameras	Grid							
Sliding Gates	Grid	6					Equivalent to Existing Grid Demand	
Gate Arms	Grid	10					for Sliding Gates & Gate Arms	
Pop-up Barriers	Grid	6	208	15	3120	0.00083	463 /1	
UVIS Prescreening System	Grid	1	240	10	2400	0.00083	356 /2	
ALPR Prescreening System	Grid	1			500	0.00139	124 /3	
X-Ray System	Grid	1			36000	0.00250	16020 /4	
Total							148,362	83 /5

Net Annual Demand (kWh)	Net Annual GHG Emissions (MT)
16,962	-4

Notes:

/1 Pop-up barrier demand based on RSSI commercial barriers http://www.rssi.com/downloads/docs/RSS-2000%20CutSheet.pdf

/2 UVIS Prescreening demand based on Gatekeeper commercial UVIS http://itt-kubba.com/products/gatekeeper/en/GKH-2011%20Overview.pdf

/3 ALPR Prescreening demand based on http://www.advanced-detection-technology.com/assets/user/media/Bid_Specs_VI150.docx

/4 X-Ray Time per Vehicle based on 10 second scan per 5 meter vehicle. http://www.d-tec-system.de/m/dl_ZPORTAL_DS_112106_D-TeC-E.pdf

/5 GHG Emissions for Grid Power: 1,230.45 lbs CO2e / MWh per CalEEMod2031.3.1 Defaults (User Guide Appendix A)

It is assumed that the actual electrical demand from the proposed project Guard Booth, Restrooms, and CCTV components will be less than or equal to the replaced components in the existing SAAP due to improvements in efficiency associated with CALGreen, and other plans, policies, and regulations

178,000 Vehicles are assumed to be served annual for both the proposed project and existing SAAP scenarios

Greenhouse gas emissions calculations for the existing SAAP are provided in the Generator Analysis section of this appendix.

LAX SAAP - Comparison Operational Air Quality Emissions

AQ emissions associated with the electrical demand of operation of the project

Operational Emissions due to Power Demand from in-Basin Sources

Proposed project emissions			
Demand:	55 Mwh		
	360,203 scf natual gas		lbs/day
CO	0.0151 tons		0.082739726
ROG	0.001 tons		0.005479452
NO2	0.0069 tons		0.037808219
SO2	0.0001 tons		0.000547945
PM10	0.0014 tons		0.007671233
PM2.5	0.0014 tons		0.007671233

Existing SAAP 21 emissions		
Emissions from SAAP Existing Generator Analysis.xlsx document		lbs/day
CO	0.5051 tons	2.767671233
ROG	0.2216 tons	1.214246575
NO2	0.5829 tons	3.193972603
SO2	0.1807 tons	0.990136986
PM10	0.0291 tons	0.159452055
PM2.5	0.0291 tons	0.159452055

From AP-42, Emission Factors associated with combustion of Natural Gas

Pollutant	**Emission Factor (lb/10^6 scf)**	
SO2	0.6	
VOC	5.5	
CO	84	
PM10	7.6	
PM2.5	7.6	*Conservative assume to be 100% of PM10*

Maximum emissions rate per SCAQMD 1135

NO2 0.25 lb/MWh

SCAQMD Rule 1135

Maximum Allowable Nox emissions rate for LADWP: 0.25 lb/MWh

http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1135.pdf?sfvrsn=4

37 percent of basin energy comes from basin

http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/DRAFT2016AQMP/AQMPCH10.pdf?sfvrsn=4 (page 14)

EPA AP-42 used for emissions rates for combustion of natural gas

https://www3.epa.gov/ttnchie1/ap42/ch01/final/c01s04.pdf

2015 Integrated Resource Plan (FINAL IRP)

pdf

52-60% efficient heating value of natural gas to electical generation

https://www.aep.com/about/IssuesAndPositions/Generation/Technologies/NaturalGas.aspx

3.41214 scf per 1 kWh

3412.14 scf per 1 MWh