

Meridian D-1 Gateway Aviation Center Project

DRAFT ENVIRONMENTAL IMPACT REPORT

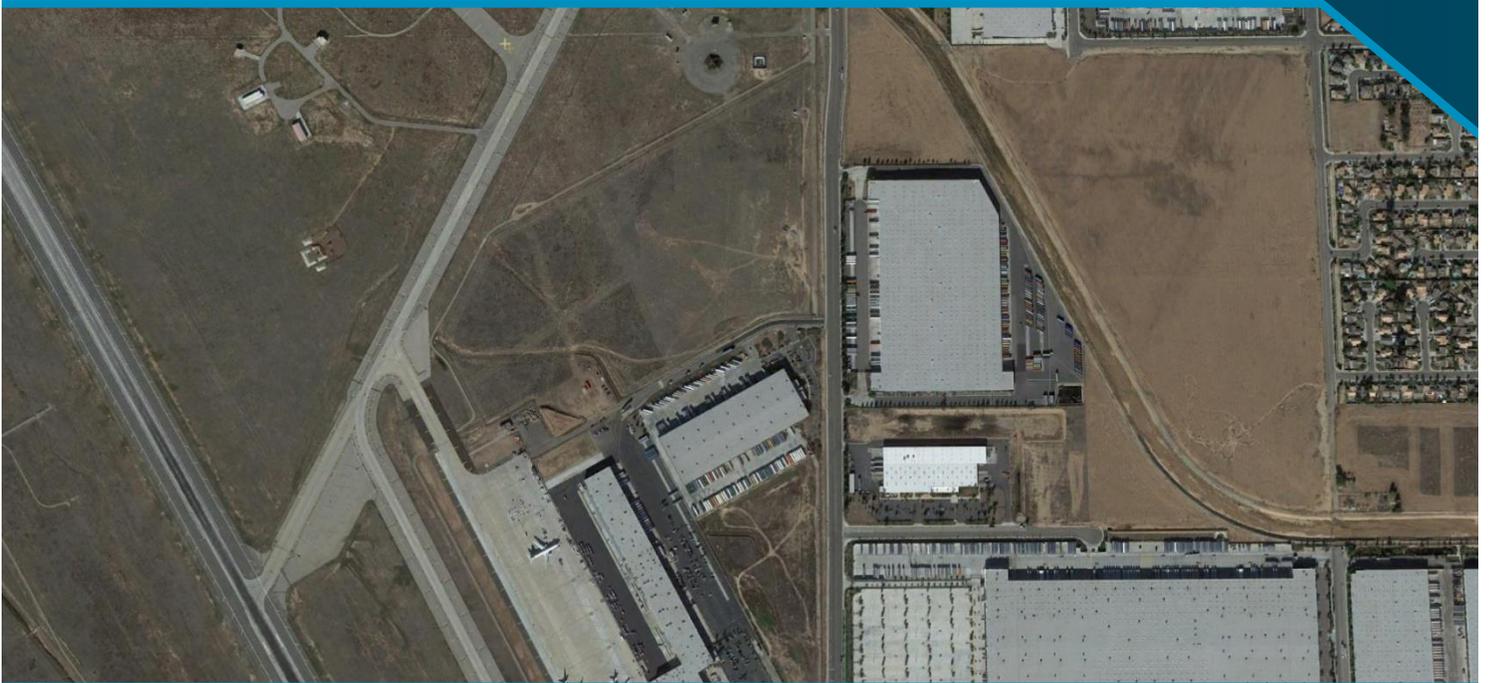
SCH No. 20210400012
May 2024

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N-1 EMWD/MMWD Interagency Agreement for Intertie to Serve March ARB

N-2 MARB Water Master Plan

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N-4 EMWD Wastewater Will-Serve Letter
0 Fuel Farm Letter

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
AC	Advisory Circular
ACE	Affordable Clean Energy
AEDT	Aviation Environmental Design Tool
AERMOD	American Meteorological Society/U.S. Environmental Protection Agency Regulatory Model
AFB	Air Force Base
AICUZ	Air Installations Compatibility Use Zones
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
APE	area of potential effects
APN	Assessor's Parcel Number
APZ	Accident Potential Zone
AQMP	air quality management plan
ARB	Air Reserve Base
ASA	Acoustical Society of America
BAU	business-as-usual
bgs	below ground surface
BMP	best management practice
BSA	biological study area
BTR	Biological Technical Report
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CadnaA	Computer-Aided Noise Abatement
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEnviroScreen	California Communities Environmental Health Screening Tool
CALGreen	California Green Building Standards
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
CH ₄	methane
CHRIS	California Historical Resources Information System
CMP	Congestion Management Program
CNEL	community noise equivalent level
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CRMTP	Cultural Resource Monitoring and Treatment Plan
CRPR	California Rare Plant Rank
CWA	Clean Water Act
CY	cubic yard
CZ	Clear Zone
DAF	U.S. Department of the Air Force
dB	decibel
dBA	A-weighted decibel
DDT	dichlorodiphenyltrichloroethane
DEH	Department of Environmental Health
DIF	development impact fee
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMFAC	EMission FACtor
EMWD	Eastern Municipal Water District
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act
ESL	Environmental Screening Level
EV	electric vehicle
FAA	Federal Aviation Administration
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
FEMA	Federal Emergency Management Agency
FICON	Federal Interagency Committee on Noise
FHWA	Federal Highway Administration
FTA	Federal Transportation Administration
FW	federal waters
GCR	General Conformity Rule
GHG	greenhouse gas
gpm	gallons per minute
GVWR	gross vehicle weight rating
GWP	global warming potential

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
H&SC	California Health and Safety Code
HAP	hazardous air pollutant
HARP	Hotspots Analysis and Reporting Program
HBW	home-based work
HCOC	Hydrologic Conditions of Concern
HCP	Habitat Conservation Plan
HDPE	high-density polyethylene pipe
HERO	Human and Ecological Response Office
HFC	hydrofluorocarbon
HMBP	hazardous materials business plan
HMCP	hazardous materials contingency plan
hp	horsepower
HPI	Healthy Places Index
I	Interstate
IEPR	Integrated Energy Policy Report
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
ISO	International Standards Organization
ISTEA	Intermodal Surface Transportation Efficiency Act
JPA	Joint Powers Authority
kBTU	thousand British thermal units
kWh	kilowatt-hour
L ₂	noise levels equaled or exceeded during 2% of specified time
L ₈	noise levels equaled or exceeded during 8% of specified time
L ₂₅	noise levels equaled or exceeded during 25% of specified time
L ₅₀	noise levels equaled or exceeded during 50% of specified time
LCFS	Low-Carbon Fuel Standard
L _{dn}	day/night sound level
L _{eq}	energy equivalent sound level
LID	low-impact development
L _{max}	maximum noise level during a noise measurement period
L _{min}	minimum noise level during a noise measurement period
LOS	level of service
LST	localized significance threshold
MARB	March Air Reserve Base
mgd	million gallons per day
MIP	March Inland Port
MIPAA	March Inland Port Airport Authority
MLD	most likely descendant
MM	Mitigation Measure
MMT	million metric ton
MOB 5	Main Operating Base 5
mpg	miles per gallon
MPO	metropolitan planning organization

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
MT	metric ton
MWEL0	Model Water Efficient Landscape Ordinance
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NAVD 88	North American Vertical Datum of 1988
NCCP	Natural Community Conservation Planning
NDC	nationally determined contribution
NEPA	National Environmental Policy Act
NF ₃	nitrogen trifluoride
NHTSA	National Highway Traffic Safety Administration
NL	not listed
NO	nitric oxide
NOP	Notice of Preparation
NO _x	oxides of nitrogen
NO ₂	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWW	non-wetland waters
OBL	obligate wetland
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
OWHM	ordinary high water mark
PAH	polycyclic aromatic hydrocarbon
PAPI	precision approach path indicator
PCB	polychlorinated biphenyl
PDF	Project Design Feature
PFC	perfluorocarbon
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
Phase I ESA	Phase I Environmental Site Assessment
PM _{2.5}	fine particulate matter
PM ₁₀	coarse particulate matter
PPA	Potential Ponding Area
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
psi	pounds per square inch
RCDWR	Riverside County Department of Waste Resources
RCFD	Riverside County Fire Department

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RCSD	Riverside County Sheriff's Department
RIVCOM	Riverside County Transportation Demand Model
ROD	Record of Decision
RPS	Renewables Portfolio Standard
RSL	regional screening level
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
S	Swale
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SF ₆	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SHP	Soil Handling Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO ₂	sulfur dioxide
SO ₄	sulfates
SoCalGas	Southern California Gas Company
SRA	Source Receptor Area
SVE	soil vapor extraction
SW	state wetlands
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TA	Traffic Analysis
TAC	toxic air contaminant
TCE	trichloroethylene
TCR	tribal cultural resource
TDM	Transportation Demand Management
TEA-21	Transportation Equity Act for the 21st Century
TMDL	total maximum daily load
TUMF	Transportation Uniform Mitigation Fee
TWA	time-weighted average
UPL	obligate upland
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
VMT	vehicle miles traveled
VOC	volatile organic compound
WDID	Waste Discharge Identification
WDR	Waste Discharge Requirement
WMWD	Western Municipal Water District
WRCOG	Western Riverside Council of Governments
WW	wetland waters

ES Executive Summary

ES.1 Introduction

This Draft Environmental Impact Report (EIR) has been prepared by the March Joint Powers Authority (JPA) as lead agency pursuant to the California Environmental Quality Act (CEQA), California Public Resources Code Section 21000 et seq., and the CEQA Guidelines (14 CCR 15000 et seq.). This Draft EIR has been prepared to evaluate the environmental effects of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project). The purpose of this Draft EIR is to focus the discussion on those potential effects on the environment of the Proposed Project that March JPA has determined may be significant. In addition, Project Design Features (PDFs) that will be incorporated into the Proposed Project to avoid causing environmental impacts are provided, and feasible mitigation measures are recommended, when applicable, that could reduce or avoid significant environmental impacts.

The Proposed Project would also require U.S. Department of the Air Force (DAF) approval for the Proposed Project components on March Air Reserve Base (ARB), which is a federal discretionary action subject to environmental review under the National Environmental Policy Act (NEPA). An Environmental Assessment (EA) is being prepared to cover the NEPA analysis with the Federal Aviation Administration (FAA) as the lead agency and DAF as a cooperating agency. As the federal lead agency, FAA has primary responsibility to ensure that the EA complies with NEPA (42 USC 4321 et seq.); the Council on Environmental Quality regulations that implement the procedural provisions of NEPA (40 CFR, Parts 1500–1508); as promulgated at Title 32 of the Code of Federal Regulations (CFR), Part 989. The EA would also meet the requirements of FAA Order 1050.1F, dated July 16, 2015, and follow the EA document guidance of FAA 1050.1F Desk Reference Version 2, dated February 2020.

The project site is located west of Heacock Street and southwest of the intersection of Heacock Street and Krameria Avenue, in unincorporated Riverside County, California, on approximately 46 acres. Of the 46 acres, approximately 34 acres are located within March Inland Port (MIP) Airport under the jurisdiction of March JPA (Air Cargo Center Component), and approximately 12 acres are located on March ARB (Off-Site Component).

The March ARB Fire Department facility is located immediately north of the project site, and industrial warehouse facilities occupied by Hanes/DDI and an air cargo center occupied by KRIV-Amazon are located immediately south of the site. March ARB is located west of the Air Cargo Center Component portion of the project site. Along the Heacock Street corridor to the east of the project site are a variety of industrial and business park warehouse uses within the City of Moreno Valley. The nearest residential area is located approximately 0.5 miles to the east. Interstate 215 is located approximately 1 mile west of the project site.

ES.2 Document Organization

This Draft EIR is organized as follows:

Executive Summary outlines the conclusions of the environmental analysis and provides a summary of the Proposed Project and the project alternatives analyzed in the Draft EIR. This section also includes a table summarizing all environmental impacts identified in the Draft EIR along with the associated mitigation measures proposed to reduce or avoid each impact, as well as a table providing a comparison of the impacts of the Proposed Project and each alternative and the determination of the environmentally superior alternative.

Chapter 1, Introduction, serves as a forward to the Draft EIR, introducing the Proposed Project, the applicable environmental review procedures, and the organization of the Draft EIR.

Chapter 2, Project Description, provides a thorough description of the setting, objectives, characteristics, construction, and operation of the Proposed Project and required discretionary approvals. This chapter also provides all PDFs in full.

Chapter 3, Environmental Analysis, describes the potential environmental impacts of the Proposed Project, as well as proposed mitigation measures to reduce or avoid any potentially significant impacts. The discussion in Chapter 3 is organized into 14 environmental issue areas, as follows:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

For each environmental issue area, the analysis and discussion are organized into the following subsections:

- **Existing Conditions** – This subsection provides information describing the existing setting on or surrounding the project site that may be subject to change as a result of the implementation of the Proposed Project.
- **Relevant Plans, Policies, and Ordinances** – This subsection describes the laws, regulations, ordinances, plans, and policies applicable to the environmental issue area and the Proposed Project.
- **Project Design Features** – Where applicable, features of the Proposed Project that are incorporated into the project design and that would reduce or avoid potential environmental impacts are identified. This subsection is not included for issue areas with no relevant PDFs.
- **Thresholds of Significance** – This subsection provides criteria for determining the significance of Proposed Project impacts for each environmental topic.
- **Impacts Analysis** – This subsection provides a discussion of the characteristics of the Proposed Project that may have an effect on the environment, analyzes the nature and extent to which the Proposed Project is expected to change the existing environment, and indicates whether the Proposed Project impacts meet or exceed the levels of significance thresholds.
- **Mitigation Measures** – This subsection identifies measures to reduce potentially significant adverse impacts to the extent feasible.
- **Level of Significance after Mitigation** – This subsection provides a discussion of significant impacts that cannot be feasibly mitigated or avoided, significant impacts that would be mitigated to a less-than-significant level, impacts that would be less than significant, and impacts that would not occur.
- **Cumulative Effects** – This subsection provides a discussion of cumulative environmental effects of the Proposed Project in combination with related projects as well as the Proposed Project’s contribution to the cumulative environmental effects.
- **References Cited** – This subsection provides a list of references and documents cited within the section.

Chapter 4, Other CEQA Considerations, addresses impact areas determined to be less than significant through the Initial Study process, significant environmental effects that cannot be avoided, the significant irreversible environmental changes that would result from implementation of the Proposed Project, and growth-inducing impacts associated with the Proposed Project.

Chapter 5, Alternatives, discusses alternatives to the Proposed Project, including a No Project Alternative. This chapter describes the rationale for selecting the range of alternatives discussed in the Draft EIR and identifies the alternatives considered by March JPA that were rejected from further discussion as infeasible during the scoping process. Lastly, Chapter 5 includes a discussion of the environmental impacts of the alternatives that were carried forward for analysis and identifies the environmentally superior alternative.

Chapter 6, List of Preparers, gives names and contact information of those responsible for writing this Draft EIR.

Appendices include various technical studies prepared for the Proposed Project, as listed in the Table of Contents.

ES.3 Project Background

In 1993, the federal government, through the Defense Base Closure and Realignment Commission, mandated the realignment of March Air Force Base (AFB) and a substantial reduction in its military use. In April 1996, March AFB was redesignated as an Air Reserve Base (ARB). The decision to realign March AFB resulted in approximately 4,400 acres of property and facilities being declared surplus and available for disposal actions. To oversee the dispensation and management of the surplus land, the Cities of Moreno Valley, Perris, and Riverside and the County of Riverside formed March JPA in 1993, which continues to serve as the reuse authority of March ARB.

In January 1996, March JPA established the March Joint Powers Redevelopment Agency, which drafted and implemented a redevelopment plan for the surplus land within the realigned March ARB. March JPA adopted the March AFB Redevelopment Plan for the March AFB Redevelopment Project in July 1996, which provided the administrative mechanism and funding to facilitate the redevelopment of the realigned March ARB. The March AFB Redevelopment Plan includes a number of goals to guide future development within the surplus land, including the following goals applicable to the Proposed Project: maximize the development potential as a regional Intermodal Transportation Facility to support both passenger and freight-related air services; replace lost jobs with new and expanded employment opportunities; maximize joint use (military and civilian) opportunities at airport-related land and facilities; and emphasize the development of aviation uses other than federal aviation, such as commercial and/or freight carrier services. Concurrent with development and adoption of the March AFB Redevelopment Project, DAF prepared an Environmental Impact Study for Disposal of a Portion of March AFB, and March JPA and the March Joint Powers Redevelopment Agency prepared an EIR for the March AFB Redevelopment Project. The Redevelopment Project evaluated in the EIR considered the development of approximately 7,250 acres. The area evaluated included 6,782 acres consistent with the boundaries of March ARB at that time, approximately 4,524 acres of which was to be transferred to the authority of March JPA. The remaining 2,258 acres was to stay under the control of the military. Additionally, 467 acres within the City of Moreno Valley was included in the EIR analysis; however, this land remains under the land use and jurisdictional control of the City of Moreno Valley.

In March 1997, March JPA assumed land use control for all surplus property identified and began preparation of a General Plan for the planning area. In 1999, March JPA approved the March JPA General Plan and Master EIR (1999 Master EIR; SCH No. 97071095) for the March JPA planning area, which includes March ARB. The 1999 Master EIR evaluated up to 1.44 million square feet of aviation facilities on 316 acres. The General Plan now serves as the land use and development guidance document for development within the March JPA planning area.

On May 7, 1997, DAF and March JPA entered into a Joint Use Agreement to designate March ARB as a joint use airport. DAF defines a “joint use airport” as one where facilities that are owned and operated by DAF are made available for use by civil aviation. The Joint Use Agreement resulted in a lease for more than 350 acres and established the civilian airport named March Inland Port (MIP) Airport. Under the agreement, March JPA and the military entities share essential aviation facilities, such as the control towers and runways, as well as maintenance of facilities. The MIP Airport is the civilian facility that is managed and operated by the MIP Airport Authority.

ES.4 Project Description

ES.4.1 Project Overview

As discussed in detail in Chapter 2, Project Description, of this Draft EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within MIP Airport under the jurisdiction of March JPA. The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March ARB. Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day (34 flight operations per day). During the holiday season (i.e., late November through late December), increased aircraft operations would be anticipated to average 22 flights per day, resulting in an additional 128 two-way flights (256 flight operations) over the 4-week period. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).¹

ES.4.2 Project Objectives

The Proposed Project includes requesting a zoning designation and plot plan approvals, to construct an approximately 180,800-square-foot cargo building and associated infrastructure, as described in Section ES-6, Required Permits and Approvals. The primary objectives of the Proposed Project are as follows:

- More fully utilize the operations capacity of the MIP Airport to meet regional demands for air cargo services within Southern California and the greater region, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region.
- Provide appropriate land use intensities to comply with the parameters of the March ARB/Inland Port Airport Compatibility Plan.
- Avoid impacts to, or impediment of, the remediation of the burn areas within Site 7.
- Provide increased job opportunities for local residents through the provision of employment-generating businesses.
- Improve access to the existing taxiways for airport users.
- Facilitate development of aviation uses other than federal military aviation.

¹ Day flights would occur between 7:00 a.m. and 7:00 p.m., evening flights would occur from 7:00 p.m. to 10:00 p.m., and night flights would occur from 10:00 p.m. to 11:00 p.m.

ES.4.3 Project Design Features

The following PDF has been incorporated into the Proposed Project and analysis throughout this Draft EIR.

Transportation

PDF-TRA-1 Payment of Fair-Share Cost. To address operational deficiencies at off-site intersections, prior to the issuance of a certificate of occupancy, the Proposed Project shall contribute \$281,498 (with Heacock Street Extension) as its fair share toward the improvement measures provided in Table 1-5, Summary of Improvements and Rough Order of Magnitude Costs – with Heacock Street Extension, of the Traffic Analysis (Appendix M-1 to this EIR).

ES.5 Areas of Known Controversy

A public scoping period was held to solicit input on the scope of the analysis for the Draft EIR between March 31, 2021, and April 29, 2021. Additionally, an open house scoping meeting was held by March JPA on April 14, 2021. The purpose of this meeting was to seek input from public agencies and the general public regarding the potential environmental impacts of the Proposed Project. Thirteen written comments were received during the scoping period. Comment letters are included in Appendix A of this Draft EIR. The public comments, questions, and concerns that were received at the scoping meeting, as well as in writing, generally pertained to the following topics:

- Hazards and hazardous materials exposure related to Site 7
- Water supply and service impacts
- Potential for air quality impacts from construction and operation
- Aesthetics impacts related to Proposed Project buildout and operation
- Tribal consultation requirements, pursuant to Assembly Bill 52 and Senate Bill 18
- Noise impacts from operation
- Traffic impacts
- Biological resources impacts

ES.6 Required Permits and Approvals

To facilitate Proposed Project approval, the following would be required; details for each component are provided below.

Zoning Designation

The project site has not previously been given a zoning designation; therefore, because the Proposed Project would be consistent with the March General Plan land use designation of Aviation (AV), the applicant is requesting a zoning designation of AV for the approximately 34-acre Air Cargo Center Component.

Plot Plans

Concurrent with the requested zoning designation, plot plan approvals are required to construct an approximately 180,800-square-foot cargo building, an expansion of the existing taxiways/tarmac, stormwater facilities (including an underground detention basin), expansion of the existing access roadway and a signalized entrance onto Heacock Street, and utility connections (water, sewer, electrical, and gas) within the existing access roadway and Heacock Street.

Other Discretionary Approvals

The following additional discretionary permits and approvals *may* be necessary as part of Proposed Project approval:

- DAF – Approval of the EA prepared per NEPA
- FAA – Approval of the Airport Layout Plan update
- U.S. Army Corps of Engineers – A Jurisdictional Determination to identify and locate the boundaries of jurisdictional waters of the United States on the project site, and, if jurisdictional waters are impacted, a permit pursuant to Section 404 of the Clean Water Act
- March ARB – Approval of the tarmac expansion and necessary easements for Work Areas 1–5
- State Water Resources Control Board – A National Pollutant Discharge Elimination System Construction General Permit (permit registration documents include a Stormwater Pollution Prevention Plan)
- California Department of Fish and Wildlife – A 1602 Streambed Alteration Agreement
- California Department of Toxic Substances Control – Notification prior to construction for (1) approval of the project under the Environmental Restrictive Covenant and (2) approval of the hazardous materials contingency plan
- Regional Water Quality Control Board, Santa Ana Region – A 401 Water Quality Certification or a Waste Discharge Requirement Permit from the Regional Water Quality Control Board (401 certification is needed if a U.S. Army Corps of Engineers Section 404 permit is needed)

ES.7 Impacts Determined to Be Significant

Table ES-1 provides a summary of the impact analysis related to the Proposed Project. The table summarizes the significant environmental impacts resulting from the Proposed Project pursuant to the CEQA Guidelines Section 15123(b)(1). For more detailed discussion, please see Chapter 3, Environmental Analysis, of this Draft EIR. Table ES-1 also lists the applicable mitigation measures related to identified significant impacts from the Proposed Project, as well as the level of significance after mitigation is identified. As discussed in Section 3.2, Air Quality, impacts associated with operational air quality were identified as being significant and unavoidable. As discussed in Section 3.11, Noise, impacts associated with operational flight noise was identified as being significant and unavoidable. Cumulative impacts associated with operational air quality and operational flight noise were also identified as being significant and unavoidable.

ES.8 Effects Found Not to Be Significant

As stated in Chapter 4, Other CEQA Considerations, of this Draft EIR, the Initial Study (Appendix A) concluded that the Proposed Project would not result in significant impacts to agriculture and forestry resources, mineral resources, population and housing, public services, recreation, and wildfire. Additionally, the Proposed Project would not result

in significant impacts to certain thresholds for a number of environmental resources topics, as described in Appendix A, including the following: aesthetics, geology and soils, hazards and hazardous materials, land use and planning, and transportation. Therefore, these specific resource thresholds are not addressed in the Draft EIR as separate environmental impact analysis and are not summarized in Table ES-1.

Several environmental topics were determined to have a less-than-significant impact with mitigation incorporated, a less-than-significant impact, or no impact, as described in Chapter 3 of the Draft EIR, including the following: aesthetics, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, transportation, tribal cultural resources, and utilities and service systems.

ES.9 Summary of Environmental Impacts and Mitigation

Table ES-1 provides a summary of the environmental impacts resulting from the Proposed Project pursuant to CEQA Guidelines Section 15123(b)(1). For a more detailed discussion, please see Chapter 3 of this Draft EIR.

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Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
3.1 Aesthetics			
AES-1. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than significant	N/A	Less than significant
Would the project result in cumulatively considerable effects related to aesthetics?	Less than significant	N/A	Less than significant
3.2 Air Quality			
AQ-1. Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially significant	<p>MM-AQ-1 Construction Management Plan. Prior to the issuance of a grading permit, the applicant shall prepare and submit to the March Joint Powers Authority (JPA) for approval a Construction Management Plan to ensure that off-road diesel construction equipment rated at 50 horsepower or greater complies with U.S. Environmental Protection Agency/California Air Resources Board Tier 4 off-road emissions standards or equivalent and that all construction equipment is tuned and maintained in accordance with the manufacturer’s specifications. All equipment maintenance records and data sheets, including design specifications and emission control tier classifications, shall be kept on site and furnished to March JPA or other regulators upon request.</p> <p>MM-AQ-2 Construction Requirements. Prior to issuance of a grading permit and/or building permit, the applicant shall provide evidence to March Joint Powers Authority (JPA) that the subject plans contain the following requirements and restrictions:</p> <ul style="list-style-type: none"> A. No grading shall occur on days with an Air Quality Index forecast greater than 150 for particulates or ozone as forecasted for the project area (Source Receptor Area 24). B. Active ground disturbance shall not exceed 20 acres per day. C. Contractor shall require all heavy-duty trucks hauling onto the project site to be model year 2014 or later. This measure shall not apply to trucks that are not owned or operated by the contractor since it would be infeasible to prohibit access to the site by any truck that is otherwise legal to operate on California roads and highways. D. No construction equipment idling longer than 3 minutes shall be permitted. No off-road diesel-powered equipment shall be in the “on” position for more than 8 hours per day. E. No diesel-powered portable generators shall be used, unless necessary due to emergency situations or constrained supply. F. Contractor required to provide transit and ridesharing information to on-site construction workers. G. Contractor required to establish location for food or catering truck service to construction workers and to cooperate with food service providers to provide consistent food service. H. Use of electric-powered hand tools, forklifts, and pressure washers, to the extent feasible. I. Designation of an area in the construction site where electric-powered construction vehicles and equipment can charge. J. Project will utilize “Super-Compliant” low volatile organic compound (VOC) paints that have been reformulated to exceed the regulatory VOC limits put forth in the South Coast Air Quality Management District’s Rule 1113. Super-Compliant low VOC paints shall be no more than 10 	Less than significant with mitigation incorporated (Construction) Significant and unavoidable (Operation)

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>grams per liter (g/L) of VOC. Alternatively, the applicant may utilize tilt-up concrete buildings that do not require the use of architectural coatings.</p> <p>MM-AQ-3 Improved Energy Efficiency and Water Reduction.</p> <p>A. Building Design – Prior to issuance of a building permit, March Joint Powers Authority (JPA) shall confirm that building plans include the following:</p> <ul style="list-style-type: none"> i. Building constructed to achieve 2023 Leadership in Energy and Environmental Design (LEED) Silver certification standards or equivalent, at a minimum. ii. Energy Star-certified light bulbs and light fixtures. iii. Duct insulation to a minimum level (R-6) of and modestly enhanced window insulation (0.28 or less U-factor, 0.22 or less solar heat-gain coefficient [SHGC]). iv. A modest cool roof, defined as Cool Roof Rating Council Rated 0.15 aged solar reflectance and 0.75 thermal emittance. v. Heating, ventilation, and air conditioning equipment with a season energy efficiency ratio of 14 or higher and energy efficiency ratio [EER] 14/78% annual fuel utilization efficiency [AFUE] or 8 heating seasonal performance factor [HSPF]. vi. Water heaters with an energy factor of 0.92 or higher. vii. All occupied rooms shall have some form of daylighting (e.g., skylights or windows). viii. At least 50% of artificial lighting unit fixtures shall be high efficacy. ix. Waterless urinals and high efficiency toilets. x. Water-efficient faucets (1.28 gpm). xi. Blower door home energy rating system (HERS) verified envelope leakage or equivalent. xii. Enhanced insulation (rigid wall insulation R-13 or equivalent, roof/attic R-38). xiii. Cool surface treatments on all drive aisles and parking areas or with a solar-reflective cool pavement such as concrete subject to Airport Land Use Commission (ALUC) approval. <p>B. Landscape Design – Prior to issuance of a building permit, March JPA shall confirm building and landscaping plans include the following:</p> <ul style="list-style-type: none"> i. Electrical outlets to each of the areas in the vicinity of the building that are to be landscaped so that electrical equipment shall be used for landscape maintenance. This measure may also be satisfied by locating charging stations around the building to accommodate battery-operated equipment. ii. Landscape non-potable water system shall meet “purple” pipe standards. iii. Water efficient landscaping having no turf and only drought-tolerant plants and including additional water-efficient irrigation controls such as smart irrigation controllers. <p>C. Tenant Agreement Requirements – Prior to issuance of a certificate of occupancy, March JPA shall confirm any tenant agreement includes the following:</p> <ul style="list-style-type: none"> i. Require the use of electric or battery-operated equipment for landscape maintenance. 	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<ul style="list-style-type: none"> ii. Require the use of electric service yard trucks (hostlers), pallet jacks and forklifts, and other on-site equipment, with necessary electrical charging stations provided. Yard hostlers may be diesel fueled in lieu of electrically powered, provided that the occupant submits a letter identifying that electric hostlers are technically infeasible and provided such yard hostlers are compliant with California Air Resources Board (CARB) Tier 4 Final compliant for off-road vehicles. As an alternative, hydrogen fuel-cell or compressed natural gas (CNG) powered equipment shall also be acceptable. iii. Require provision of the following information annually to employees and truck drivers as appropriate: <ul style="list-style-type: none"> a. Building energy efficiency, solid waste reduction, recycling, and water conservation. b. Vehicle greenhouse gas (GHG) emissions, electric vehicle charging availability, and alternate transportation opportunities for commuting. c. Participation in the Voluntary Interindustry Commerce Solutions (VICS) “Empty Miles” program to improve goods trucking efficiencies. d. Health effects of diesel particulates, state regulations limiting truck idling time, and the benefits of minimized idling. e. The importance of minimizing traffic, noise, and air pollutant impacts to any residences in the Project vicinity. f. Efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. <p>MM-AQ-4 Truck Requirements.</p> <ul style="list-style-type: none"> A. Building Design – Prior to issuance of a building permit, March Joint Powers Authority (JPA) shall confirm the following: <ul style="list-style-type: none"> i. The loading docks shall be designed to accommodate SmartWay trucks. ii. Conduit shall be installed in truck courts in logical locations that would allow for the future installation of charging stations for electric trucks, in anticipation of this technology becoming available. iii. Applicant shall provide project specifications, drawings, and calculations that demonstrate that main electrical supply lines and panels have been sized to support ‘clean fleet’ charging facilities, including heavy trucks and delivery vehicles, when these trucks become available. The calculations shall be based on reasonable predictions from currently available truck manufacturer’s data. Electrical system upgrades that exceed reasonable costs shall not be required. B. Anti-Idling Signs – Prior to issuance of a certificate of occupancy, March JPA shall confirm the following: <ul style="list-style-type: none"> i. Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include (1) instructions for truck drivers to shut off 	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 3 minutes once the vehicle is stopped, the transmission is set to “neutral” or “park,” and the parking brake is engaged; and (3) telephone numbers of the building facilities manager, South Coast Air Quality Management District, and CARB to report violations. Prior to the issuance of an occupancy permit, March JPA shall conduct a site inspection to ensure that the signs are in place. One 6-square-foot sign providing this information shall be located on the building between every two dock-high doors and the sign shall be posted in highly visible locations at the entrance gates, semi parking areas, and trailer parking locations.</p> <p>C. Prior to issuance of a certificate of occupancy, March Joint Powers Authority shall confirm any tenant agreement includes the following:</p> <ul style="list-style-type: none"> i. Tenant to apply in good faith for funding to replace/retrofit their trucks, such as Carl Moyer, VIP, Prop 1B, SmartWay Finance, or other similar funds. If awarded, the tenant shall be required to accept and use the funding. Tenant shall be encouraged to consider the use of alternative fueled trucks, as well as new or retrofitted diesel trucks. Tenant shall also be encouraged to become SmartWay Partners, if eligible. ii. Tenant shall monitor and ensure compliance with all current air quality regulations for on-road trucks including CARB’s Heavy-Duty (Tractor-trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program, and the Statewide Truck and Bus Regulation, as applicable. <p>MM-AQ-5 Commute Trip Reduction. Prior to issuance of a certificate of occupancy, March Joint Powers Authority shall confirm any tenant agreement includes the following:</p> <ul style="list-style-type: none"> A. Reservation of a total of 5% of vehicle/employee parking spaces for preferential spaces for carpools and van pools. B. Provision of short- and long- term bicycle parking facilities to meet peak season maximum demand (one bike rack space per 20 vehicle/employee parking spaces). C. Provision of “end-of-trip” facilities including showers, lockers, and changing space (four clothes lockers and one shower provided for every 80 employee parking spaces). D. Provision of on-site food vending machines or refrigerator, microwave oven, and mail facilities (i.e., drop box) at the project site. Office space shall include an on-site computer, internet connection, and other services for personal employee use. E. Requirement to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking. <p>MM-AQ-6 Additional Air Quality Tenant Requirements. Prior to issuance of a certificate of occupancy, March JPA shall confirm any tenant agreement includes the following:</p> <ul style="list-style-type: none"> A. Tenant shall not use diesel back-up generators, unless absolutely necessary. Tenant shall provide documentation demonstrating, to March JPA’s satisfaction, that no other back-up energy source(s) are available and sufficient for the building’s needs. If absolutely necessary, at the time of initial operation, generators shall have Best Available Control Technology (BACT) that meets 	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>CARB's Tier 4 emission standards or meets the most stringent in-use standard, whichever has the least emissions. In the event rental back-up generators are required during an emergency, the units shall be located at the project site for only the minimum time required. Tenant shall make every effort to utilize rental emergency backup generators that meet CARB's Tier 4 emission standards or have the least emissions.</p> <p>B. Tenant shall sweep the property monthly, including parking lot and truck court, to remove road dust, tire wear, brake dust, and other contaminants.</p> <p>C. Tenant shall comply with all applicable requirements of the MMRP, a copy of which shall be attached to each agreement.</p>	
<p>AQ-2. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?</p>	Potentially significant	See MM-AQ-1 through MM-AQ-6 .	Less than significant with mitigation incorporated (Construction) Significant and unavoidable (Operation)
<p>AQ-3. Would the project expose sensitive receptors to substantial pollutant concentrations?</p>	Potentially significant	See MM-AQ-1 through MM-AQ-6 .	Less than significant with mitigation incorporated
<p>AQ-4. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</p>	Less than significant	N/A	Less than significant
<p>Would the project result in cumulatively considerable effects related to air quality?</p>	Potentially significant	See MM-AQ-1 through MM-AQ-6 .	Less than significant with mitigation incorporated (Construction) Significant and unavoidable (Operation)
<p>3.3 Biological Resources</p>			
<p>BIO-1. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</p>	Potentially significant	<p>MM-BIO-1A Burrowing Owl Avoidance and Minimization Measures. Prior to the initiation of ground disturbance, a qualified biologist shall conduct pre-construction surveys for burrowing owl to determine presence/absence of the species. The survey shall be conducted in accordance with the most current and applicable California Department of Fish and Wildlife (CDFW) protocol within 30 days of site disturbance. If burrowing owls are not detected during the clearance survey, no additional mitigation is required. Pre-construction surveys shall include suitable burrowing owl habitat within the project footprint and within 500 feet of the project footprint (or within an appropriate buffer as required in the most recent guidelines and where legal access to conduct the survey exists). If burrowing owls are not detected during the clearance survey, no additional mitigation is required.</p> <p>If burrowing owl is detected, occupied burrowing owl burrows shall not be disturbed during the breeding season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through non-invasive methods that either the birds have not begun egg laying and incubation, or that juveniles from the occurred burrows are foraging independently and capable of independent survival. Disturbance buffers shall be implemented by a qualified biologist in accordance with the recommendations within CDFW's 2012 Staff Report on Burrowing Owl Mitigation and in coordination with CDFW. A biologist shall be contracted to perform monitoring approximately every other day during all ground disturbance and construction activities. The definitive frequency and duration of monitoring shall be dependent on whether it is the breeding season or the non-breeding season and the efficacy of the exclusion buffers, as determined by a qualified biologist and in coordination with CDFW.</p>	Less than significant with mitigation incorporated

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>If burrowing owl is detected during the non-breeding season (September 1 through January 31) or confirmed to not be nesting, a non-disturbance buffer between Proposed Project activities and the occupied burrow shall be installed by a qualified biologist in accordance with the recommendations in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and in coordination with CDFW. The project applicant shall submit at least one burrowing owl pre-construction survey report to the satisfaction of the March Joint Powers Authority and CDFW to document compliance with this mitigation measure. For the purposes of this mitigation measure, a "qualified biologist" is a biologist who meets the requirements set forth in the CDFW 2012 Staff Report on Burrowing Owl Mitigation.</p> <p>MM-BIO-1B Burrowing Owl Relocation and Mitigation Plan. If burrowing owls are identified within the project site, a Burrowing Owl Relocation and Mitigation Plan (Plan) shall be prepared and submitted for approval by the California Department of Fish and Wildlife (CDFW). Any passive or active relocation shall only occur outside the burrowing owl breeding season. Once the Plan is approved, any passive or active relocation of non-breeding burrowing owls from the project site shall be implemented by a qualified biologist. The Plan shall detail methods and guidance for passive or active relocation of burrowing owls from the project site, as well as any proposed mitigation (e.g., replacement habitat, creation of artificial burrows, identification of conservation lands, or as otherwise described in the CDFW 2012 Staff Report on Burrowing Owl Mitigation). The Plan will also provide a description of surrounding suitable habitat conditions; describe any monitoring (if passive relocation is implemented); locate a receiver site and assess the conditions for burrowing owl suitability (if active relocation is implemented) followed by burrowing owl relocation activity details, and implement monitoring and management of relocated owls on the receiver site; and describe reporting requirements. Additional compensatory mitigation may also be required by CDFW if occupied burrows or territories occur within the permanent impact footprint. In coordination with CDFW, any additional compensation may include off-site enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. Off-site mitigation may also require long-term protection through a conservation easement or other protective measure. Compensatory mitigation shall also be detailed in the Burrowing Owl Relocation and Mitigation Plan.</p> <p>MM-BIO-2 Best Management Practices. To avoid impacts to special-status resources and inadvertent disturbance to areas outside the project construction limits, the following monitoring requirements and best management practices (BMPs) shall be implemented:</p> <ol style="list-style-type: none"> 1. A biologist shall be contracted to perform daily monitoring during initial vegetation removal and throughout ground-disturbing activities that result in the breaking of the ground surface. After initial vegetation removal and ground disturbance that results in breaking of the ground surface, a biologist shall be contracted to perform regular random checks (not less than once per week but the frequency could be increased depending on the presence of special-status species) to ensure that all mitigation measures and BMPs are implemented. In addition, monitoring reports and a post-construction monitoring report shall be prepared to document compliance with these mitigation measures and BMPs and submitted to the March Joint Powers Authority (JPA). 2. To prevent inadvertent disturbance to areas outside the limits of work, the construction limits shall be clearly demarcated (e.g., installation of flagging or temporary visibility construction fence) prior to ground-disturbing activities, and all construction activities, including equipment staging and maintenance, shall be conducted within the marked disturbance limits. The work limit delineation shall be maintained throughout project construction. Should construction fencing be installed to delineate the limits of work, adequate openings along the northern and western perimeters shall be established to allow for dispersal of wildlife into the adjacent 	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>undeveloped lands. The contractor shall consult with the biological monitor to confirm that construction fencing will prevent unauthorized access beyond the limits of work while allowing wildlife to escape from active construction areas.</p> <ol style="list-style-type: none"> 3. A biologist shall flush special-status species (i.e., avian or other mobile species) from suitable habitat areas immediately prior to initial vegetation removal activities. 4. Construction vehicles shall not exceed 15 mph on unpaved roads adjacent to the project site or the right-of-way accessing the site. 5. If trash and debris need to be stored overnight during construction activities, fully covered trash receptacles that are animal proof and weather proof shall be used by the contractor to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Alternatively, standard trash receptacles may be used during the day, but must be removed each night. 6. Temporary structures and storage of construction materials shall not be located in jurisdictional waters, including wetlands or riparian areas. 7. Staging/storage areas for construction equipment and materials shall not be located in jurisdictional waters, including wetland or riparian areas. 8. The operator shall not permit pets on or adjacent to construction sites. 9. As per the Landscaping Guidelines of the Resource Management Element of the 1999 March JPA General Plan, drought-tolerant vegetation and native vegetation shall be used, consistent with March JPA Landscape Water Efficiency Ordinance No. JPA 16-03, with the purpose of preserving existing native vegetation, as applicable. A qualified botanist shall review landscape plans to recommend appropriate provisions to minimize the spread of invasive plant species, as listed by the California Invasive Plant Council (www.cal-ipc.org) and California Native Plant Society (www.cnps.org), within the project site. Provisions may include installation of container plants and/or hydro-seeding areas adjacent to existing, undisturbed native vegetation areas with native plant species that are common within temporary impact areas, and review and screening of proposed plants to identify and avoid potential invasive species and weed removal during the initial planting of landscaped areas. Species used in landscaping shall not include trees that would attract raptor or other large avian species, thus potentially facilitating increased risk of aircraft/bird strikes. 10. To avoid the creation of wildlife attractants that could pose risks to aircraft operations and to comply with the Airport Land Use Compatibility Plan for March Air Reserve Base, landscape plans shall be reviewed by a Federal Aviation Administration-Qualified Airport Wildlife Biologist. <p>MM-BIO-3 San Diego Black-Tailed Jackrabbit Avoidance and Minimization Measures. Thirty days prior to ground-disturbing activities, a qualified biologist shall conduct a survey within the proposed disturbance zone and within 200 feet of the disturbance zone for San Diego black-tailed jackrabbit. If San Diego black-tailed jackrabbits are present, non-breeding rabbits shall be flushed from areas to be disturbed. Dens, depressions, nests, or burrows occupied by pups shall be flagged and ground-disturbing activities shall be avoided within a minimum of 200 feet during the pup-rearing season (February 15 through July 1). This buffer may be reduced based on the location of the den upon consultation with the California Department of Fish and Wildlife (CDFW). Occupied maternity dens, depressions, nests, and burrows shall be flagged for avoidance. A biologist shall be contracted to perform daily monitoring during initial vegetation removal and throughout ground-disturbing activities that result in the breaking of the ground surface, as further described in MM-BIO-2. If construction fencing is installed, the contractor shall establish adequate openings within the northern and western fence perimeters to allow for passive dispersal into adjacent undeveloped lands during construction.</p>	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>Fence openings will not include openings that direct wildlife to existing aircraft operations. If unattended young are discovered, they shall be relocated to suitable habitat by a qualified biologist. The biologist shall document all San Diego black-tailed jackrabbits identified, avoided, and/or moved, and provide a written report to CDFW within 72 hours. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits, and only in consultation with CDFW.</p> <p>MM-BIO-4 Nesting Bird Avoidance and Minimization Measures. To avoid direct impacts to raptors and/or native/migratory birds (including California horned lark), vegetation removal and grading activities should occur outside the breeding season (February 1 through September 15) for these species. If removal of habitat in the proposed area of disturbance must occur during the breeding season (September 16 through January 31), a qualified biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-construction survey shall be conducted within 3 calendar days prior to the start of ground disturbance (including removal of vegetation).</p> <p>If an active nest is found, a qualified avian biologist shall alert the Operations Manager or Wildlife Hazard Manager at March Air Reserve Base to the presence of the nest to determine whether the nest poses risks to aircraft operations. The biologist shall establish an exclusion buffer, with the established buffer width being dependent on preventing all disruption of nesting behavior and nest activity. All active nests shall be monitored throughout construction, at a frequency determined by a qualified biologist, until ground disturbance and construction activities are concluded or the nest is no longer active, whichever occurs first. The biological monitor shall exercise caution to minimize disturbance to the nest. Photographs and other documentation shall be conducted away from the nest to prevent disturbance. Geographic information system (GIS) points shall be taken at/near the active nest only to the extent that the nest will not be disturbed, and nesting behavior will not be disrupted.</p>	
<p>BIO-2. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	<p>Potentially significant</p>	<p>MM-BIO-5 Jurisdictional Waters Permitting and Regulatory Agency Permitting. The project site supports aquatic resources that are considered jurisdictional under the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). Prior to ground disturbance, the project applicant shall coordinate with the USACE, Los Angeles District, to assure conformance with the requirements of Section 404 of the Clean Water Act and with the Santa Ana RWQCB (Region 8) to ensure conformance with the requirements of Section 404/401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Prior to activity within CDFW-jurisdictional streambed or associated riparian or wetland habitat, the project applicant shall coordinate with CDFW (Eastern Sierra and Inland Desert Region 6) relative to conformance to the Lake and Streambed Alteration permit requirements.</p> <p>The Proposed Project shall mitigate at not less than 1:1 with reestablishment credits (0.45 acres USACE/0.45 acres RWQCB/0.49 acres CDFW) for impacts to aquatic resources as part of an overall strategy to ensure no net loss. Mitigation shall be completed through use of a mitigation bank (e.g., Riverpark Mitigation Bank) or other applicant-sponsored mitigation. Final mitigation ratios and credits shall be determined through consultation with USACE, RWQCB, and/or CDFW based on agency evaluation of current resource functions and values and through each aquatic resource agency's respective permitting process.</p>	<p>Less than significant with mitigation incorporated</p>

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>Should applicant-sponsored mitigation be implemented, a Habitat Mitigation and Monitoring Plan shall be prepared in accordance with State Water Resources Control Board guidelines and approved by the agencies in accordance with the proposed program permits. The Habitat Mitigation and Monitoring Plan shall include a conceptual planting plan, including planting zones, grading, and irrigation, as applicable; a conceptual plant palette; weeding practices; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity. Any off-site applicant-sponsored mitigation shall be located a minimum of 10,000 feet away from the project site in order to avoid creating new wildlife attractants near the airfield.</p> <p>Best management practices shall be implemented to avoid any indirect impacts to jurisdictional waters, as follows:</p> <ol style="list-style-type: none"> 1. Vehicles and equipment shall not be operated in ponded or flowing water except as described in permits. 2. Water containing mud, silt, or other pollutants from grading or other activities shall not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows. 3. Spoil sites shall not be located within 30 feet from the boundaries of jurisdictional waters or in locations that may be subject to high storm flows where spoils might be washed back into drainages. 4. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources resulting from Proposed Project-related activities shall be prevented from contaminating the soil and/or entering avoided jurisdictional waters. 5. No equipment maintenance shall be performed within 100 feet of jurisdictional waters, including wetlands and riparian areas, where petroleum products or other pollutants from the equipment may enter these areas. Fueling of equipment shall not occur on the project site. 	
BIO-3. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially significant	See MM-BIO-5 .	Less than significant with mitigation incorporated
BIO-4. Would the project 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?	Less than significant	N/A	Less than significant
BIO-5. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially significant	See MM-BIO-5 .	Less than significant with mitigation incorporated
BIO-6. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Potentially significant	See MM-BIO-1A, MM-BIO-1B, MM-BIO-2, and MM-BIO-5 .	Less than significant with mitigation incorporated

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
Would the project result in cumulatively considerable effects related to biological resources?	Potentially significant	See MM-BIO-1A through MM-BIO-5 .	Less than significant with mitigation incorporated
3.4 Cultural Resources			
CUL-1. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	No impact	N/A	No impact
CUL-2. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Potentially significant	<p>MM-CUL-1 Archaeological and Tribal Monitoring. Prior to issuance of a grading permit, the project applicant shall retain a qualified tribal monitor to monitor all initial ground-disturbing activities, including, but not limited to, clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, and structure demolition. The applicant shall secure an agreement with the tribe (or tribes) for tribal monitoring. The applicant shall submit a copy of a signed contract between the tribe (or tribes) and the landowner/applicant for the monitoring of the Proposed Project to March Air Reserve Base (ARB) and the March Joint Powers Authority (JPA) Planning Director. The applicant shall provide a minimum of 30 days' advance notice to the tribe (or tribes) of all mass grading and trenching activities.</p> <p>Prior to the commencement of ground-disturbing activities, the Proposed Project's qualified archaeological Principal Investigator (Principal Investigator), meeting the Secretary of the Interior's Professional Qualification Standards, in consultation with the tribe, March ARB, March JPA, and the construction manager, shall develop a Cultural Resource Monitoring and Treatment Plan (CRMTP). The CRMTP shall define the process to be followed upon discovery of cultural resources to ensure the proper treatment, evaluation, and management of cultural resources within the project site, should they be encountered during construction.</p> <p>A. For purposes of CRMTP implementation, the project area subject to monitoring is defined as:</p> <ol style="list-style-type: none"> 1. All areas within the project site boundary specifically in which ground-disturbing activities (e.g., including, but not limited to, clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, and structure demolition) will occur are subject to monitoring. 2. Any on-site or off-site ancillary Proposed Project use areas or facility locations are subject to the protocols outlined in the CRMTP. These include, but are not limited to, access roadways, yards/support areas, easements, staging areas, and utility tie-ins. <p>B. The CRMTP shall include a requirement for all construction personnel to complete a Cultural Resources Worker Sensitivity Training program (Training) prior to commencement of construction activities. The Training shall be conducted by a qualified archaeologist (Project Archaeologist). The Training shall provide (1) the types and characteristics of cultural materials that may be identified during construction and an explanation of the importance of and legal basis for the protection of significant cultural resources; (2) proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities, including procedures for work curtailment or redirection; and (3) protocols for contacting the site supervisor and archaeological and tribal monitor upon discovery of a cultural resources or human remains. All new construction personnel must take the Training prior to beginning ground-disturbing activities.</p> <p>C. The following protocols shall be included in the CRMTP:</p> <ol style="list-style-type: none"> 1. The Project Archaeologist and the tribal monitor(s) shall manage and oversee monitoring for all initial ground-disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, structure demolition, etc. The Project Archaeologist and the tribal 	Less than significant with mitigation incorporated

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>monitor(s) shall have the authority to temporarily divert, redirect, or halt the ground-disturbing activities to allow identification, evaluation, and potential recovery of cultural resources in coordination with March JPA.</p> <p>2. If, during ground-disturbing activities, potential cultural resources are inadvertently discovered, the Project Archaeologist and tribal monitor(s) shall immediately redirect grading operations in a 100-foot radius around the discovery and the following procedures shall be followed:</p> <ul style="list-style-type: none"> a. All ground-disturbing activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the applicant, the Principal Investigator, the tribal representative(s), the Project Archaeologist and tribal monitors, and the Planning Director to discuss the significance of the find pursuant to California Public Resources Code (PRC) Section 21083.2. b. At the meeting, the significance of the discovery shall be discussed and after consultation with the Principal Investigator, the tribal representative(s), the Project Archaeologist, and tribal monitors, a decision shall be made, with the concurrence of the Planning Director, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources. c. Grading or further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. d. Treatment and disposition of the inadvertently discovered cultural resources shall be carried out in one or more of the following methods: <ul style="list-style-type: none"> i. Pursuant to PRC Section 21083.2(b), avoidance is the preferred method of preservation for cultural resources. ii. During the course of construction, all discovered resources shall be temporarily curated in a secure location on site or at the offices of the Project Archaeologist. If removal of artifacts from the project site is necessary, each artifact shall be cataloged, and an inventory will be provided to the tribal monitor upon each addition. No recordation of sacred items is permitted without the written consent of the tribe. iii. Following the completion of the Proposed Project, the applicant shall relinquish ownership of all cultural resources that have been determined to be of Native American origin to the tribe. iv. If the landowner and the tribe cannot come to a consensus on the significance of, or the mitigation for, the Native American cultural resource, these issues will be presented to the Planning Director for decision. The Planning Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and recommendations of the archaeological Principal Investigator and shall consider the cultural and religious principles and practices of the tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to March JPA. v. On-site reburial of the discovered items may occur and shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. 	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>Regardless of discovery, at the completion of all ground-disturbing activities, the Project Archaeologist shall prepare a Monitoring Report and submit it to March ARB; March JPA; the Eastern Information Center located at the University of California, Riverside; and the designated tribal government. The Monitoring Report will document all monitoring efforts and be completed within 60 days of conclusion of all ground-disturbing activities.</p> <p>MM-CUL-2 Inadvertent Discovery of Archaeological Resources. In the event that archaeological resources are inadvertently unearthed during excavation and grading activities for the Proposed Project, the contractor shall cease all earth-disturbing activities within a 100-foot radius of the area of the discovery and notify March Air Reserve Base (ARB) and March Joint Powers Authority (JPA). The Project Archaeologist, meeting the Secretary of the Interior’s Professional Qualification Standards for Archaeology, shall evaluate the significance of the find and determine the appropriate course of action. Authorization to resume construction shall be given by March ARB and March JPA only after consultation with the qualified archaeologist and shall include implementation of all appropriate measures to protect any possible archaeological resources.</p>	
<p>CUL-3. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?</p>	<p>Potentially significant</p>	<p>MM-CUL-3 Inadvertent Discovery of Human Remains. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the project contractor shall immediately halt work and contact the Riverside County Coroner to evaluate the discovery. The contractor shall also notify March Air Reserve Base (ARB) and March Joint Powers Authority (JPA). No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the Native American Heritage Commission (NAHC) within 24 hours. In accordance with California Public Resources Code Section 5097.98, NAHC shall immediately notify those persons it believes to be the most likely descendants (MLDs) of the deceased Native American. The MLDs shall complete their inspection within 48 hours of being granted access to the site. The MLDs shall then determine, in consultation with the property owner or their representative, the disposition of the human remains. Authorization to resume construction shall be given by March ARB and March JPA only after consultation with the MLDs and shall include implementation of all appropriate measures to protect any possible burial sites and/or human remains.</p>	<p>Less than significant with mitigation incorporated</p>
<p>Would the project result in cumulatively considerable effects related to cultural resources?</p>	<p>Potentially significant</p>	<p>See MM-CUL-1 through MM-CUL-3.</p>	<p>Less than significant with mitigation incorporated</p>
<p>3.5 Energy</p>			
<p>ENG-1. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?</p>	<p>Less than significant</p>	<p>See MM-AQ-2 through MM-AQ-5 and MM-GHG-1 (not required, but would provide co-benefits by further reducing energy demand).</p>	<p>Less than significant</p>
<p>ENG-2. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?</p>	<p>Less than significant</p>	<p>N/A</p>	<p>Less than significant</p>
<p>Would the project result in cumulatively considerable effects related to energy?</p>	<p>Less than significant</p>	<p>See MM-AQ-3 through MM-AQ-5 and MM-GHG-1 (not required, but would provide co-benefits by further reducing energy demand).</p>	<p>Less than significant</p>

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
3.6 Geology and Soils			
<p>GEO-1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and/or seismic-related ground failure, including liquefaction?</p>	Less than significant	N/A	Less than significant
<p>GEO-2. Would the project 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 lateral spreading, subsidence, liquefaction or collapse?</p>	Less than significant	N/A	Less than significant
<p>GEO-3. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?</p>	Less than significant	N/A	Less than significant
<p>GEO-4. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</p>	Potentially significant	<p>MM-GEO-1 Paleontological Monitoring Program. Prior to the issuance of a grading permit, the project applicant shall, to the satisfaction of the March Joint Powers Authority, submit a paleontological monitoring program drafted by a qualified paleontologist (Paleontologist) in accordance with Society of Vertebrate Paleontology’s 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, along with evidence that a paleontological monitor has been retained to monitor mass grading and construction activities and has the authority to temporarily halt or divert construction equipment to allow for removal of abundant or large specimens. As part of the paleontological monitoring program, the project applicant shall implement the following actions:</p> <ul style="list-style-type: none"> ▪ A paleontological monitor shall be on site during all excavations below the depth of previously disturbed sediments. Specifically, all earthmoving operations above the depth of 3 feet below ground surface (bgs) shall be monitored periodically to identify the sediments being impacted, and any earthmoving operations reaching beyond the depth of 3 feet bgs shall require continuous monitoring for potential paleontological remains. ▪ In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor shall temporarily halt and/or divert grading activities to allow evaluation and potential recovery of paleontological resources by the Paleontologist. The area of discovery plus a 50-foot-radius buffer shall be roped off. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find. ▪ Recovered specimens shall be identified to the lowest taxonomic level and curated at a repository with permanent retrievable storage that allows for further research in the future, such as the Western Science Center. ▪ If, during the paleontological monitoring program, half the Proposed Project excavations have occurred with no fossil recovery, monitoring can be reduced or terminated, as determined by the Paleontologist. ▪ A report of findings, including an itemized inventory of recovered specimens and a discussion of their significance when appropriate, shall be prepared upon completion of the research procedures outlined above. The report shall summarize the monitoring program and include geological observations and any paleontological resources recovered during paleontological monitoring for the Proposed Project. Approval of the report and the inventory by the March Joint Powers Authority shall signify completion of the mitigation program. 	Less than significant with mitigation incorporated

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
Would the project result in cumulatively considerable effects related to geology and soils?	Less than significant	N/A	Less than significant
3.7 Greenhouse Gas Emissions			
GHG-1. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially significant	See MM-AQ-2 through MM-AQ-6 . MM-GHG-1 Installation of EV Charging Stations. Prior to issuance of a building permit, March Joint Powers Authority shall ensure that the Proposed Project plans include the circuitry, capacity, and equipment for electric vehicle (EV) charging stations in accordance with Tier 2 of the 2022 CALGreen Code.	Less than significant with mitigation incorporated
GHG-2. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Potentially significant	See MM-AQ-2 through MM-AQ-6 and MM-GHG-1 .	Less than significant with mitigation incorporated
Would the project result in cumulatively considerable effects related to greenhouse gas emissions?	Potentially significant	See MM-AQ-2 through MM-AQ-6 and MM-GHG-1 .	Less than significant with mitigation incorporated
3.8 Hazards and Hazardous Materials			
HAZ-1. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially significant (Construction) Less than significant (Operation)	MM-HAZ-1 Hazardous Materials Contingency Plan. Prior to issuance of a grading permit, the project applicant shall submit to March JPA for review and approval a hazardous materials contingency plan (HMCP) that addresses the potential impacts to soil, soil vapor, and groundwater beneath the project site to ensure the health and safety of construction workers and future occupants of the industrial uses on the site. The HMCP shall include procedures for assessment, characterization, handling, transportation, and disposal of potentially contaminated soils and soil vapor. Contaminated soils shall be managed and disposed of in accordance with federal, state, and local regulations, and in accordance with the rules of the receiving landfill. The HMCP shall be submitted to U.S. Environmental Protection Agency Region IX and the state (California Department of Toxic Substances Control and the Santa Ana Regional Water Quality Control Board) for review of the protective measures during work within Site 7, which is under an Environmental Restrictive Covenant. The HMCP shall include health and safety measures for handling contaminated soils and working in potentially contaminated soil vapor, including procedures for soil vapor and breathing zone monitoring in accordance with South Coast Air Quality Management District (SCAQMD) Rule 1166, and control of fugitive dust emissions in accordance with SCAQMD Rules 1403 and 1466. The HMCP shall be implemented at all times during excavation, grading, and construction activities, or other activities that could disturb or be impacted by site soils or soil vapors. MM-HAZ-2 Stop Work, Groundwater Management. Construction activities shall not disturb existing treatment system (soil vapor extraction [SVE] system) wells or monitoring wells. Although construction activities are not anticipated to encounter groundwater, should groundwater be encountered during excavation and/or construction activities, work activities directly associated with/impacted by the discovery of groundwater shall cease. The project applicant or their designee shall contact the Santa Ana Regional Water Quality Control Board, the March Joint Powers Authority, and the March Air Reserve Base environmental group, all of which oversee the cleanup of CGO49/OU5, to determine appropriate procedures to either manage contaminated groundwater or alter construction plans to avoid further contact with contaminated groundwater. Either construction plans shall be altered to avoid groundwater depths, or dewatering activities shall be designed to remove groundwater from excavations as needed to complete proposed activities, characterize the groundwater, and either utilize on-site treatment systems to treat and discharge groundwater, with approval of the treatment system operator and overseeing regulatory agency, or otherwise manage the groundwater as approved	Less than significant with mitigation incorporated (Construction) Less than significant (Operation)

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		by the overseeing regulatory agency. The agreed-upon plan shall be prepared and implemented prior to recommencement of construction activities.	
HAZ-2. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into environment the?	Potentially significant (Construction) Less than significant (Operation)	See MM-HAZ-1 and MM-HAZ-2 (Construction). N/A (Operation)	Less than significant with mitigation incorporated (Construction) Less than significant (Operation)
HAZ-3. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as result, would it create a significant hazard to the public or the environment?	Potentially significant (Construction) Less than significant (Operation)	See MM-HAZ-1 and MM-HAZ-2 (Construction). N/A (Operation)	Less than significant with mitigation incorporated (Construction) Less than significant (Operation)
HAZ-4. 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 or excessive noise for people residing or working in the project area?	Less than significant (Construction) Potentially significant (Operation)	N/A (Construction) MM-HAZ-3 Wildlife Protective Measures. Project design shall incorporate recommendations included in the Wildlife Hazard Review for the Proposed Project, including screening the parking lot with a screen wall or non-vegetated boundary; moving lunch patios indoors or equipping lunch areas with covered trash receptacles that are emptied daily; eliminating all trees and shrubs from landscaping plans; using only small fescue for groundcover; replacing landscaping with cobbles/stones; or using non-irrigated native hydroseed mixes.	Less than significant (Construction) Less than significant with mitigation incorporated (Operation)
Would the project result in cumulatively considerable effects related to hazards and hazardous materials?	No impact	N/A	No impact
3.9 Hydrology and Water Quality			
HYD-1. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Potentially significant	MM-HYD-1 Water Quality BMPs. Project design shall include installing drainage sumps that separate sediment, using grease removal/trap systems, and ensuring that ground support and maintenance equipment washing areas are plumbed to the sanitary sewer (instead of the stormwater system). See MM-HAZ-1 , MM-HAZ-2 , and MM-AQ-6 .	Less than significant with mitigation incorporated
HYD-2. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less than significant	N/A	Less than significant
HYD-3. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on or off site?	Less than significant	N/A	Less than significant
HYD-4. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the	Less than significant	N/A	Less than significant

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site, or that would 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?			
HYD-5. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?	No impact	N/A	No impact
HYD-6. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	No impact	N/A	No impact
HYD-7. Would the project conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan?	Less than significant	N/A	Less than significant
Would the project result in cumulatively considerable effects related to hydrology and water quality?	Less than significant	N/A	Less than significant
3.10 Land Use and Planning			
LU-1. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Potentially significant	MM-LU-1 Occupancy Limits. Prior to the issuance of a certificate of occupancy, the project applicant shall demonstrate, via an Airport Land Use Commission Condition of Approval, to the March Joint Powers Authority's satisfaction that the levels of human occupancy would not exceed the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan's maximum permissible average of 100 persons per acre or 250 persons per single acre. See also MM-AQ-1 through MM-AQ-6 , MM-BIO-1A through MM-BIO-5 , MM-CUL-2 , MM-CUL-3 , MM-GEO-1 , MM-GHG-1 , MM-HAZ-1 , MM-HAZ-2 , MM-NOI-1 through MM-NOI-2 , MM-TRA-1 , and MM-TRA-2 .	Less than significant with mitigation incorporated
Would the project result in cumulatively considerable effects related to land use and planning?	Potentially significant	See MM-LU-1 , MM-AQ-1 through MM-AQ-6 , MM-BIO-1A through MM-BIO-5 , MM-CUL-2 , MM-CUL-3 , MM-GEO-1 , MM-GHG-1 , MM-HAZ-1 , MM-HAZ-2 , MM-NOI-1 through MM-NOI-2 , MM-TRA-1 , and MM-TRA-2 .	Less than significant with mitigation incorporated
3.11 Noise			
NOI-1. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less than significant	N/A	Less than significant
NOI-2. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than significant	N/A	Less than significant

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
<p>NOI-3. For a project located within the vicinity of a private airstrip or 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?</p>	<p>Potentially significant</p>	<p>MM-NOI-1 Construction Worker Hearing Protection. Prior to issuance of any grading permit and building permit, the applicant shall provide evidence that the subject plans contain the following requirements and restrictions:</p> <ul style="list-style-type: none"> ▪ Contractors shall provide personal protective equipment to all employees in compliance with 8 CCR, Section 5096 [Exposure Limits for Noise]. ▪ Contractors shall provide all employees with a copy of “Protecting Yourself from Noise in Construction – Pocket Guide” OSHA Publication 3498 (2011), or similar educational materials. <p>MM-NOI-2 Future Tenant Aircraft Fleet. Prior to issuance of a certificate of occupancy, the applicant shall provide documentation to March Joint Powers Authority confirming that expected noise emissions from the tenant’s aircraft fleet mix do not exceed the noise impacts identified and disclosed in this Environmental Impact Report. Such documentation shall confirm the residential areas that would experience a significant noise increase due to aircraft operations is equal to or less than that disclosed under Threshold NOI-3. Absent such documentation, additional environmental review shall be required.</p>	<p>Less than significant with mitigation incorporated (Project Aircraft Operation Noise – Worker Exposure)</p> <p>Significant and unavoidable (Project Aircraft Operation Noise – Residential Receptors Exposure)</p>
<p>NOI-4. Would the project result in aircraft operations (i.e., aircraft landings and/or takeoffs) at the March Inland Port Airport between 10:00 p.m. and 6:59 a.m. that could expose people within the March Inland Port Airport’s vicinity to a significant risk of sleep disturbance due to noise, as based on a single event noise exposure level analysis?</p>	<p>Less than significant</p>	<p>N/A</p>	<p>Less than significant</p>
<p>Would the project result in cumulatively considerable effects related to noise?</p>	<p>Potentially significant</p>	<p>See MM-NOI-1 and MM-NOI-2</p>	<p>Significant and unavoidable</p>
<p>3.12 Transportation</p>			
<p>TRA-1. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?</p>	<p>Potentially significant</p>	<p>MM-TRA-1 Construction Traffic Management Plan. Prior to the issuance of building permits, the applicant shall develop and implement a March Joint Powers Authority-approved Construction Traffic Management Plan (CTMP) addressing potential construction-related traffic detours and disruptions to ensure that to the extent practical, construction traffic would access the project site during off-peak hours; and shall include, but not be limited to, the following measures:</p> <ul style="list-style-type: none"> ▪ Maintain existing access for land uses in proximity of the project site throughout construction. ▪ Designate an on-site employee parking area. ▪ Schedule deliveries and pickups of construction materials during non-peak travel periods. ▪ Minimize obstruction of through traffic lanes on Heacock Street. ▪ Ensure that construction equipment traffic from the contractors is controlled by flagman. ▪ Identify designated transport routes for heavy trucks to be used throughout Project construction. ▪ Schedule vehicle movements to ensure that there are no vehicles waiting off site and impeding public traffic flow on the surrounding streets. 	<p>Less than significant with mitigation incorporated</p>

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
		<ul style="list-style-type: none"> ▪ Establish requirements for loading/unloading and storage of materials on the project site, where parking spaces would be encumbered; length of time traffic travel lanes can be encumbered; and sidewalk closings or pedestrian diversions to ensure the safety of the pedestrian and access to adjacent businesses and/or properties. Ensure that any travel lane encumbrances do not occur during peak traffic hours. ▪ Coordinate with adjacent or affected businesses and/or properties and emergency service providers to ensure that adequate access exists to the project site and neighboring sites. ▪ Route construction traffic to avoid travel through, or proximate to, sensitive land uses. ▪ Provide all construction contractors with written information on the CTMP, along with clear consequences to violators for failure to follow the CTMP. ▪ Post signage on Heacock Street with contact information for the project manager for public questions or concerns about construction traffic. Ensure that a response to comments or inquiries is provided within 72 hours of receipt. <p>MM-TRA-2 Project Truck Route on Heacock Street. The project applicant shall ensure that all leasing agreements for the Proposed Project require that all Proposed Project truck traffic utilize the Harley Knox Boulevard interchange at I-215 and the designated truck routes to the south of the project site. The intersection improvements at Heacock Street shall include installed signage directing trucks to the Harley Knox Boulevard interchange.</p>	
<p>TRA-2. Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?</p>	<p>Less than significant</p>	<p>N/A</p>	<p>Less than significant</p>
<p>TRA-3. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?</p>	<p>Less than significant</p>	<p>N/A</p>	<p>Less than significant</p>
<p>Would the project result in cumulatively considerable effects related to transportation?</p>	<p>Less than significant</p>	<p>N/A</p>	<p>Less than significant</p>

3.13 Tribal Cultural Resources

TCR-1. Would the project 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 size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

<p>i. 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 section 5020.1(k)?</p>	<p>Less than significant</p>	<p>N/A</p>	<p>Less than significant</p>
<p>ii. 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 Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<p>Potentially significant</p>	<p>See MM-CUL-1.</p>	<p>Less than significant with mitigation incorporated</p>

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance after Mitigation
Would the project result in cumulatively considerable effects related to tribal cultural resources?	Potentially significant	See MM-CUL-1.	Less than significant with mitigation incorporated
3.14 Utilities and Service Systems			
UTL-1. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less than significant	N/A	Less than significant
UTL-2. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than significant	N/A	Less than significant
UTL-3. Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than significant	N/A	Less than significant
UTL-4. Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than significant	N/A	Less than significant
UTL-5. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No impact	N/A	No impact
Would the project result in cumulatively considerable effects related to utilities and service systems?	Less than significant	N/A	Less than significant

Notes: MM = Mitigation Measure; N/A = not applicable.

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ES.10 Summary of Project Alternatives

Section 15126.6 of the CEQA Guidelines identifies the parameters within which consideration and discussion of alternatives to the project should occur. As stated in this section of the CEQA Guidelines, alternatives must focus on those that are reasonably feasible and that attain most of the basic objectives of the project. Each alternative should be capable of avoiding or substantially lessening any significant impacts of the project. The rationale for selecting the alternatives to be evaluated and a discussion of the No Project alternative are also required, per CEQA Guidelines Section 15126.6.

ES.10.1 Alternatives Evaluated

This Draft EIR includes an evaluation of the following alternatives:

- Alternative 1: No Project
- Alternative 2: Nighttime Flight Noise Reduction
- Alternative 3: Reduced Flight Operations
- Alternative 4: Private Aircraft Services

Alternative 1: No Project

Under Alternative 1, development of the Proposed Project would not occur as discussed in Chapter 2, Project Description, of this Draft EIR. The project site would remain unchanged, and no development would occur. As a result, the proposed Zoning Designation, Plot Plan, and all other applicable pending approvals associated with the Proposed Project would not be necessary, because no new development would occur on the site that would require such actions.

Alternative 2: Nighttime Flight Noise Reduction

Under Alternative 2, Nighttime Flight Noise Reduction, buildout of the project area would occur in an identical manner to the Proposed Project. Thus, Alternative 2 would result in the development of the Air Cargo Center Component and the Off-Site Component, as discussed in Chapter 2, Project Description. The cargo building, all proposed taxiway and aircraft parking apron improvements, utility improvements, landscaping, and internal driveway/parking lot, as well as the work within the right-of-way along Heacock Street, would be constructed in the exact same manner as the Proposed Project. In addition, all off-site work planned under the Proposed Project, including the work to be completed in Work Areas 1–5, would occur under this alternative.

The operational aspects of the cargo building would remain the same as those identified for the Proposed Project. Regarding flight operations, once constructed, Alternative 2 would average 17 flights per day, and flights would occur 6 days a week, the same as the Proposed Project. During the end-of-the-year holiday season, Alternative 2 would average 22 flights per day, 6 days per week, the same as the Proposed Project. However, under this alternative, no flight operations would occur between 10:00 p.m. and 11:00 p.m. (approximately 5% of the Proposed Project's flight operations). Thus, flight operations under Alternative 2 would occur only from 7:00 a.m. to 10:00 p.m.

Alternative 3: Reduced Flight Operations

Under Alternative 3, Reduced Flight Operations, buildout of the project site would occur in an identical manner to the Proposed Project. Thus, Alternative 3 would result in the development of the Air Cargo Center Component and the Off-Site Component, as discussed in Chapter 2, Project Description. The cargo building, all proposed taxiway and aircraft parking apron improvements, utility improvements, landscaping, and internal driveways/parking lots, as well as the work within the right-of-way along Heacock Street, would be constructed in the exact same manner as the Proposed Project. In addition, all off-site work planned under the Proposed Project, including the work to be completed in Work Areas 1–5, would occur under Alternative 3.

However, under Alternative 3, annual flight operations would be reduced by 10%, resulting in total annual flight operations of 9,548. Flight operations would occur during the same hours as the Proposed Project. Operations at the air cargo center would similarly be reduced by 10%.

Alternative 4: Private Aircraft Services

Under Alternative 4, Private Aircraft Services, a private aircraft terminal facility would be constructed within the same building footprint as the cargo building for the Proposed Project. The private aircraft terminal facility would be used to provide either a new operation or an expansion of the private aircraft service facilities located south of the project site to allow for an increase in the use of private aircraft services from the MIP Airport. With construction of a private aircraft terminal facility, the 9 grade-level loading doors, 31 truck dock positions, and 37 trailer storage positions planned under the Proposed Project would not be constructed. Development under this alternative would include construction of a tarmac and parking apron, allowing for aircraft to access the terminal facility. This would include construction of a new taxiway (Taxilane J) that would provide aircraft access to the existing Taxiway A within March ARB. Alternative 4 would also include an expansion of Taxiway G and construction of a parking apron adjacent to the western boundary of the terminal facility. The proposed tarmac expansion, Taxilane J, and parking aprons would be sized to accommodate private aircraft and would be paved to meet FAA standards. The tarmac expansion, both within the project site and within March ARB, would occur in the same manner as for the Proposed Project. Access to the project site, as well as the terminal facility, would be constructed in the same manner as that planned for the Proposed Project. In addition, all off-site work planned under the Proposed Project, including the work to be completed in Work Areas 1–5, would occur under this alternative. Overall, development of Alternative 4 would result in similar construction activities to those for the Proposed Project, with the only change being the ultimate operational use associated with the building to be constructed in place of the cargo building.

Once operational, Alternative 4 would accommodate private aircraft, rather than commercial aircraft, in contrast to the Proposed Project. In addition, because there would be no air cargo facility constructed under this alternative, no air cargo would be transported to or from the project site, eliminating the movement of goods-distribution trucks to and from the project site. However, personal vehicle trips would be added for passengers of the private aircraft, and the anticipated number of employees would be 52, resulting in a reduction of employees compared to the Proposed Project. Annual flights under Alternative 4 would remain the same as the Proposed Project; however, flight operations would not occur between 10:00 p.m. and 11:00 p.m. (approximately 5% of the Proposed Project's flight operations).

ES.10.2 Environmentally Superior Alternative

Table ES-2 provides a summary of the alternatives impact analysis considered in the EIR, identifies the areas of potential environmental effects per CEQA, and ranks each alternative as better than, the same as, or worse than the Proposed Project with respect to each issue area.

Table ES-2. Comparison of Impacts from the Proposed Project and Alternatives

Environmental Topic	Proposed Project	Alternative 1: No Project	Alternative 2: Nighttime Flight Noise Reduction	Alternative 3: Reduced Flight Operations	Alternative 4: Private Aircraft Services
Aesthetics	LTS	▼ No impact	▼ LTS	▼ LTS	▼ LTS
Air Quality	SUI (operational NO _x)	▼ No impact	= SUI	▼ SUI	▼ LTS
Biological Resources	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Cultural Resources	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Energy	LTS	▼ No impact	= LTS	▼ LTS	▼ LTS
Geology and Soils	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Greenhouse Gas Emissions	LTS + mitigation	▼ No impact	= LTS + mitigation	▼ LTS + mitigation	▼ LTS + mitigation
Hazards/Hazardous Materials	LTS + mitigation	▼ No impact	= LTS + mitigation	▼ LTS + mitigation	▼ LTS + mitigation
Hydrology/Water Quality	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Land Use/Planning	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Noise	SUI	▼ No impact	▼ SUI	▼ SUI	▼ LTS
Transportation	LTS + mitigation	▼ No Impact	= LTS + mitigation	▼ LTS + mitigation	▼ LTS + mitigation
Tribal Cultural Resources	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Utilities/Service Systems	LTS	▼ No impact	= LTS	▼ LTS	▼ LTS

Notes: LTS = less than significant; SUI = significant and unavoidable; LTS + mitigation = less than significant with mitigation incorporated. **Green** = No impact or less than significant; **Yellow** = less than significant with mitigation incorporated; **Red** = significant and unavoidable.
 ▲ Impacts would be greater than those of the Proposed Project.
 = Impacts would be comparable to those of the Proposed Project.
 ▼ Impacts would be reduced compared to those of the Proposed Project.

As indicated in Table ES-2, Alternative 1, No Project, would result in the fewest environmental impacts and therefore would be considered the environmentally superior alternative. Pursuant to CEQA Guidelines Section 15126.6(e)(2), if the No Project Alternative is the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Alternative 4, Private Aircraft Services, would be the environmentally superior alternative because it would have the most reductions in impacts compared to the Proposed Project. Alternative 4 was found to result in fewer aesthetics, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, noise, transportation, and utilities and service systems impacts. Under Alternative 4, comparable impacts to biological resources, cultural resources, geology and soils, hydrology and water quality, land use and planning, and tribal cultural resources would occur when compared to the Proposed Project, and Alternative 4 would achieve most of the project objectives, but to a lesser extent.

1 Introduction

1.1 Purpose and Scope

The purpose of this Draft Environmental Impact Report (EIR) is to evaluate and disclose the potential environmental consequences of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project). The Proposed Project constitutes a “project” as defined in the California Environmental Quality Act (CEQA) Guidelines Section 15378. The March Joint Powers Authority (JPA) is the lead agency preparing this EIR in accordance with the CEQA statutes (California Public Resources Code Section 21000 et seq.), the CEQA Guidelines (14 CCR 15000 et seq.), and March JPA’s 2022 Local CEQA Guidelines (March JPA 2022).

The Proposed Project would also require U.S. Department of the Air Force (DAF) approval for the Proposed Project components on March Air Reserve Base (ARB), which is a federal discretionary action subject to environmental review under the National Environmental Policy Act (NEPA). An Environmental Assessment (EA) is being prepared to cover the NEPA analysis with the Federal Aviation Administration (FAA) as the lead agency and DAF as a cooperating agency. As the federal lead agency, FAA has primary responsibility to ensure that the EA complies with NEPA (42 USC 4321 et seq.); the Council on Environmental Quality regulations that implement the procedural provisions of NEPA (40 CFR, Parts 1500–1508); as promulgated at Title 32 of the Code of Federal Regulations (CFR), Part 989. The EA would also meet the requirements of FAA Order 1050.1F, dated July 16, 2015, and follow the EA document guidance of FAA 1050.1F Desk Reference Version 2, dated February 2020.

The Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March JPA. The Off-Site Component of the Proposed Project includes off-site improvements within approximately 12 acres of March ARB.

The project site is located west of Heacock Street and southwest of the intersection of Heacock Street and Krameria Avenue, in unincorporated Riverside County, California, on approximately 46 acres (Figure 1-1, Project Site and Setting). The March ARB Fire Department facility is located immediately north of the project site, and industrial warehouse facilities occupied by Hanes/DDI and an air cargo center occupied by KRIV-Amazon are located immediately south of the site. Along the Heacock Street corridor abutting the site to the east are a variety of industrial and business park warehouse uses within the City of Moreno Valley. The nearest residential area is located approximately 0.5 miles to the east. Interstate 215 is located approximately 3.6 driving miles west of the project site.

The project site is located within a portion of a parcel designated as Assessor’s Parcel Number (APN) 294-170-010 and a portion of a parcel designated as APN 294-170-006. APN 294-170-010 comprises 75.3 acres, of which approximately 36.5 acres is within the project site. APN 294-170-006 comprises 206 acres, of which approximately 8.9 acres is within the project site. In addition, approximately 0.13 acres is located within the City of Moreno Valley right-of-way.

The latitude and longitude of the approximate center of the project site is 33° 52’40” North and 117° 14’49” West. The project site is located within Township 3 South, Range 4 West, including Section 25 within the Riverside East 7.5-minute quadrangle, as mapped by the U.S. Geological Survey.

To facilitate approval of the Proposed Project, the following would be required:

- **Zoning Designation.** The project site has not previously been assigned a zoning designation; therefore, to be consistent with the current March JPA General Plan land use designation of Aviation (AV), the proposed project is requesting a zoning designation of Aviation (AV) for the approximately 34-acre Air Cargo Center Component.
- **Plot Plan.** Concurrent with the requested zoning designation, a Plot Plan Application would be submitted to allow construction of the following within March JPA jurisdiction:
 - An approximately 180,800-square-foot cargo building with 9 grade-level loading doors and 31 dock positions, a parking apron sufficient to support commercial cargo airplanes, 37 trailer storage positions, and 122 stalls for employee parking
 - An expansion of the existing taxiways/tarmac
 - Construction of stormwater facilities, including an underground detention basin
 - Expansion of the existing access roadway and a signalized entrance onto Heacock Street

1.2 Compliance with CEQA

1.2.1 Format

This chapter of the EIR sets forth the summary requirements of CEQA as required by Section 15123 of the CEQA Guidelines. The Executive Summary and Chapter 2, Project Description, also comply with CEQA project description requirements by discussing the project location (Section 2.1), identifying the Proposed Project objectives (Section 2.3), and providing a statement of the document’s purpose and intended use (Section 2.5).

Issues identified in the Initial Study prepared for the Proposed Project by March JPA that were found to have no impact or a less-than-significant impact are provided in Appendix A-1, Notice of Preparation, and Appendix A-2, Initial Study, of this document. This EIR has been formatted to address the issues found to be potentially significant in the Initial Study. For the issue areas found to be potentially significant in the Initial Study, there is a corresponding EIR section. Each EIR section includes an existing setting discussion that describes the physical environmental conditions within the project area that are considered the baseline physical condition from which the March JPA determines whether an impact is considered to be significant (14 CCR 15125[a]). Section 15125(d) of the CEQA Guidelines requires that an EIR “discuss any inconsistencies between the project and applicable general plans and regional plans,” which is addressed in Section 3.10, Land Use and Planning, of this EIR. Each EIR section identifies thresholds of significance and includes an analysis to determine the amount and degree of impact relative to each significance threshold that is associated with the Proposed Project, as well as any relevant project design features that will be incorporated into the project. For all significant environmental impacts, mitigation measures, where feasible, are required in order to minimize significant adverse impacts (14 CCR 15126.4[a][1]).

The analysis of impacts and identification of mitigation measures are derived from technical reports that are included as technical appendices to this EIR and from other informational resources as listed in the references cited subsection within each section of this document. The technical appendices are as follows:

- A-1: Notice of Preparation
- A-2: Initial Study
- A-3: NOP Comments
- K-1: Preliminary Hydrology Study
- K-2: Project-Specific Water Quality Management Plan
- L-1: Noise Impact Analysis Report

- B-1: Air Quality Report
- B-2: Opening Year Emissions Memo
- C-1: Health Risk Assessment Report
- C-2: Amicus Curiae Briefs
- D: Biological Technical Report
- E: Historic Properties Report
- F: Energy Analysis Report
- G: GHG Emissions Analysis Report
- H: Geotechnical Exploration Report
- I: Paleontological Resources Report
- J-1: Phase I Environmental Site Assessment
- J-2: NETR Environmental Lien Report
- J-3: Wildlife Hazard Review
- L-2: Noise Technical Report (Sleep Disturbance)
- L-3: Outdoor Ambient Sound Survey Location L5
- M-1: Traffic Analysis
- M-2: Vehicle Miles Traveled Analyses
- M-2A: VMT Analysis
- M-2B: VMT Alternatives Analysis
- N-1: EMWD/WMWD Interagency Agreement for Intertie to Serve March ARB
- N-2: MARB Water Master Plan
- N-3: Conceptual Site Plans
- N-4: WMWD Water Supply Will-Serve Letter
- O: Fuel Farm Letter

1.2.2 Environmental Procedures

According to the CEQA Guidelines, the basic purposes of CEQA are the following (14 CCR 15002):

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
2. Identify the ways that environmental damage can be avoided or significantly reduced.
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The EIR process typically consists of three parts: (1) the Notice of Preparation (NOP) (including the Initial Study), (2) the Draft EIR, and (3) the Final EIR. Pursuant to Section 15063 of the CEQA Guidelines, the March JPA prepared an Initial Study (Environmental Checklist) for the Proposed Project to determine whether the Proposed Project would have a significant effect on the environment. The NOP was intended to encourage interagency communication concerning the Proposed Project and provide sufficient background information about the Proposed Project so that agencies, organizations, and individuals could respond with specific comments and questions on the scope and content of the EIR. Based on the analysis contained in the Initial Study/NOP, March JPA concluded that an EIR should be prepared. The NOP for the EIR and a description of potential adverse impacts were distributed to the State Clearinghouse, responsible agencies, and other interested parties on March 31, 2021. Pursuant to Section 15082 of the CEQA Guidelines, recipients of the NOP were requested to provide responses within 30 days after their receipt of the NOP. During the 30-day public review period of the NOP, March JPA held a Scoping Meeting on April 14, 2021, to gather additional public input on the Proposed Project. Copies of the NOP (including the Initial Study) and the NOP distribution list are provided in Appendices A-1 and A-2. All comments received during the NOP public notice period were considered during preparation of this EIR. Written comments received on the NOP are included in Appendix A-3 of this EIR.

Based on the scope of analysis for this EIR, including comments received during the NOP public scoping period, the following issues were determined to be potentially significant and are therefore addressed in Chapter 3, Environmental Analysis, of this EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

Other potential environmental impact areas, such as agriculture and forestry resources, mineral resources, population and housing, public services, recreation, and wildfire, were not found to be significant based on the results of the Initial Study. These issues are addressed in Section 4.2, Effects Found Not to Be Significant, of this EIR.

As the lead agency for the Proposed Project, March JPA has assumed responsibility for preparing this EIR. The decision to consider the Proposed Project is within the purview of the March JPA. The March JPA will use the information included in this EIR to consider potential impacts to the physical environment associated with the Proposed Project when considering approval of the Proposed Project. As set forth in Section 15021 of the CEQA Guidelines, March JPA, as lead agency, has the duty to avoid or minimize environmental damage where feasible. Furthermore, Section 15021(d) states the following (14 CCR 15021[d]):

CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian. An agency shall prepare a statement of overriding considerations as described in Section 15093 to reflect the ultimate balancing of competing public objectives when the agency decides to approve a project that will cause one or more significant effects on the environment.

In accordance with CEQA, the lead agency will be required to make findings for each environmental impact of the Proposed Project that cannot be mitigated to a less-than-significant level. If the lead agency determines that the benefits of the Proposed Project outweigh significant environmental effects that cannot be mitigated to less than significant, the agency will be required to adopt a statement of overriding considerations stating the reasons supporting its action, notwithstanding the Proposed Project's significant environmental effects.

The EIR will be made available for review to agencies and the public for 45 days to provide comments on the "sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (14 CCR 15204[a]).

1.2.3 Incorporated by Reference

Information provided in the March JPA General Plan (March JPA 1999a), Master EIR for the March JPA (March JPA 1999b), Final Air Installation Compatible Use Zone Study for March ARB (March ARB 2018), March ARB/Inland Port Airport Land Use Compatibility Plan (Riverside County ALUC 2014), and other references were

reviewed to assist during environmental review of the Proposed Project. These documents are incorporated by reference (14 CCR 15150) and are available for review at the March JPA, 14205 Meridian Parkway, Suite 140, Riverside, California 92518.

1.2.4 NOP Comments and Scoping Meeting

The NOP for the Proposed Project was published on March 31, 2021, and conditions described therein will be the environmental baseline for the Proposed Project. Currently, existing development within the site consists of extraction well facilities, a former (now vacant) fire house, a paved taxiway and tarmac area associated with aviation uses, and various paved improvements located next to the existing taxiways. Although the project site contains some existing development, most of the site consists of vacant and undeveloped land. The public review period for the Initial Study/NOP began on March 31, 2021, and ended on April 29, 2021. Ten agencies, organizations, and individuals commented on the Initial Study/NOP, and those comments are provided in Appendix A-3 to this EIR. An overview of the comments received by agencies, organizations, and individuals is provided in Table 1-1. During the 30-day public review period of the NOP, March JPA held a scoping meeting on April 14, 2021. Discussion at the scoping meeting included concerns regarding hazards and hazardous materials, as well as water supply and water service. None of the comments received changed the issue areas that the Initial Study determined would be discussed in the EIR. All issues and concerns raised in the comments have been fully addressed and analyzed in this EIR.

Table 1-1. Summary of Comment Letters Received during the NOP Scoping Period

Comment Letter	Name, Agency/Organization	Environmental Issue Areas Discussed in Letter	EIR Section Where Comments Are Addressed
1	Andrew Green, Native American Heritage Commission	Cultural Resources; Tribal Cultural Resources	Section 3.4, Cultural Resources; Section 3.13, Tribal Cultural Resources
2	Stephen Termaath, Department of the Air Force/Air Force Civil Engineer Center	Hazards and Hazardous Materials	Section 3.8, Hazards and Hazardous Materials
3	Lijin Sun, South Coast Air Quality Management District	Air Quality	Section 3.2, Air Quality
4	Kristine Kim, Riverside County Department of Environmental Health	Hazards and Hazardous Materials; Utilities and Service Systems	Section 3.8, Hazards and Hazardous Materials; Section 3.14, Utilities and Service Systems
5	Adria Reinertson, Riverside County Fire Department	Public Services	Section 4.2, Effects Found Not to Be Significant
6	Patti Nevins, City of Moreno Valley	Aesthetics; Air Quality; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise; Transportation; Utilities and Service Systems; Public Services; Recreation; Environmental Justice	Section 3.1, Aesthetics; Section 3.2, Air Quality; Section 3.8, Hazards and Hazardous Materials; Section 3.9, Hydrology and Water Quality; Section 3.10, Land Use and Planning; Section 3.12, Transportation; Section 3.14, Utilities and Service Systems; Section 4.2, Effects Found Not to Be Significant

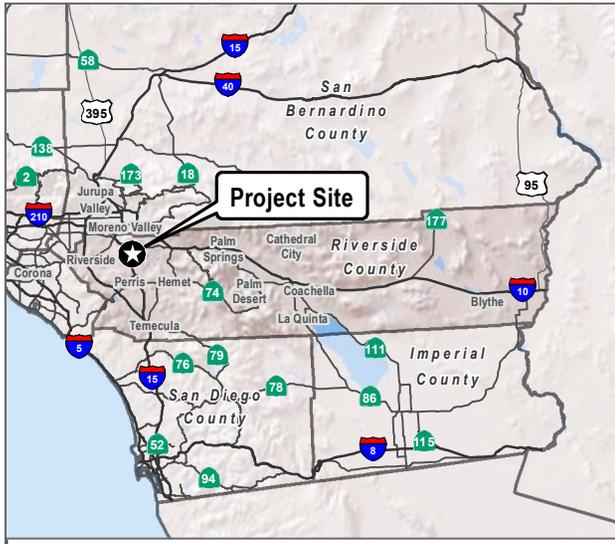
Table 1-1. Summary of Comment Letters Received during the NOP Scoping Period

Comment Letter	Name, Agency/Organization	Environmental Issue Areas Discussed in Letter	EIR Section Where Comments Are Addressed
7	David Murray, City of Riverside	Air Quality; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise; Transportation	Section 3.2, Air Quality; Section 3.8, Hazards and Hazardous Materials; Section 3.9, Hydrology and Water Quality; Section 3.12, Transportation
8	Deborah de Chambeau, Riverside County Flood Control and Water Conservation District	Biological Resources; Hydrology and Water Quality	Section 3.3, Biological Resources; Section 3.9, Hydrology and Water Quality
9	Scott Wilson, California Department of Fish and Wildlife, Inland Deserts Region	Biological Resources; Alternatives; Water Conservation	Section 3.3, Biological Resources; Section 5, Alternatives; Section 3.14, Utilities and Service Systems
10	Rodney McCraine, Department of the Air Force, Air Force Reserve Command, March Air Reserve Base	National Environmental Policy Act	Section 2.5, California Environmental Quality Act

Notes: NOP = Notice of Preparation; EIR = Environmental Impact Report.

1.3 References Cited

- March ARB (Air Reserve Base). 2018. *Final Air Installation Compatible Use Zone Study for March Air Reserve Base*. Accessed June 17, 2020. https://www.marchjpa.com/documents/docs_forms/AICUZ_2018.pdf.
- March JPA (Joint Powers Authority). 1999a. *General Plan of the March Joint Powers Authority*.
- March JPA. 1999b. *Master Environmental Impact Report for the General Plan of the March Joint Powers Authority*. Final. SCH No. 97071095. September 1999.
- March JPA. 2022. *2022 Local Guidelines for Implementing the California Environmental Quality Act for March Joint Powers Authority and March Inland Port Airport Authority and Successor Agency of the Former March Joint Powers Redevelopment Agency and March Joint Powers Utilities Authority*. Accessed January 12, 2023. https://www.marchjpa.com/documents/docs_forms/05172022_MJPA_2022_CEQA_Guidelines.pdf.
- Riverside County ALUC (Airport Land Use Commission). 2014. *March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, Volumes I and II*. Prepared by Mead & Hunt for the Riverside County Airport Land Use Commission. Santa Rosa, California: Mead & Hunt. November 13, 2014. Accessed December 18, 2020. <http://www.rcaluc.org/Plans/New-Compatibility-Plan>.



SOURCE: Bing Maps 2022; DRC Engineering 2022



FIGURE 1-1
Project Site and Setting
 Meridian D-1 Gateway Aviation Center Project

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2 Project Description

This chapter describes the objectives of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) and Draft Environmental Impact Report (EIR) and provides a detailed description of Proposed Project characteristics. This chapter also discusses the discretionary actions required.

2.1 Project Location

The project site is situated on approximately 46 acres and consist of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxilane/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port (MIP) Airport under the jurisdiction of March Joint Powers Authority (JPA). The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Three military cleanup cases, including a subarea known as Site 7, are located east of the project site and the project access road improvements overlap Site 7 slightly (refer to Section 2.4.1.1, Air Cargo Center Component, and Section 2.4.3, Project Demolition, Grading, and Construction, for details regarding the avoidance of burn areas within Site 7).

The project site is located west of Heacock Street, adjacent to March ARB, and southwest of the intersection of Heacock Street and Krameria Avenue, in unincorporated Riverside County, California (Figure 1-1, Project Site). The March ARB Fire Department facility is located immediately north of the project site, and industrial warehouse facilities occupied by Hanes/DDI and an air cargo center occupied by KRIV-Amazon are located immediately south of the site. Along the Heacock Street corridor abutting the site to the east are a variety of industrial and business park warehouse uses within the City of Moreno Valley. The nearest residential area is located approximately 0.5 miles to the east. Interstate 215 is located approximately 1 mile west of the project site.

The latitude and longitude of the approximate center of the project site is 33° 52' 40" North and 117° 14' 49" West. The project site is in Township 3 South, Range 4 West, including Section 25 within the Riverside East 7.5-minute quadrangle, as mapped by the U.S. Geological Survey. The project site is located within a portion of a parcel designated as Assessor's Parcel Number (APN) 294-170-010 and a portion of a parcel designated as APN 294-170-006. APN 294-170-010 comprises 75.3 acres, of which approximately 36.5 acres is within the project site. APN 294-170-006 comprises 206 acres, of which approximately 8.9 acres is within the project site. In addition, approximately 0.13 acres is located within the City of Moreno Valley right-of-way.

Existing development within the project site consists of one groundwater monitoring well (OU1MW14) (located in the northeast portion of the project site), a former (now vacant) fire house, paved taxiway and tarmac areas associated with aviation uses, and various paved improvements located next to the existing taxiway, as shown in Figure 2-1, Existing Site Development. Although the project site contains some existing development, most of the site consists of vacant and undeveloped land, as shown in Figure 1-1, Project Site and Setting.

The March JPA General Plan designates the parcels surrounding the project site as Aviation (AV) and Industrial (IND) (March JPA 1999a). As shown in Figure 2-2, March JPA General Plan Land Use Designations, the land use designation of most of the project site is Aviation (AV). The project site has not been assigned a zoning designation per the official March JPA Zoning Map, as shown in Figure 2-3, March JPA Zoning Designations. The Off-Site Component within March ARB is designated as "March Air Reserve Base" on both the March JPA General Plan and zoning maps.

2.2 Project Background

In 1993, the federal government, through the Defense Base Closure and Realignment Commission, mandated the realignment of March Air Force Base (AFB) and a substantial reduction in its military use. In April 1996, March AFB was redesignated as an Air Reserve Base. The decision to realign March AFB resulted in approximately 4,400 acres of property and facilities being declared surplus and available for disposal actions and allowed for joint use of the airfield. To oversee the dispensation and management of the surplus land, the Cities of Moreno Valley, Perris, and Riverside and the County of Riverside formed March JPA in 1993, which continues to serve as the reuse authority of March ARB.

In January 1996, March JPA established the March Joint Powers Redevelopment Agency, which drafted and implemented a redevelopment plan for the surplus land within the realigned March ARB. March JPA adopted the March AFB Redevelopment Plan for the March AFB Redevelopment Project in July 1996, which provided the administrative mechanism and funding to facilitate the redevelopment of the realigned March ARB (March Joint Powers Redevelopment Agency 1996a). The March AFB Redevelopment Plan includes a number of goals to guide future development within the surplus land, including the following goals applicable to the Proposed Project: maximize the development potential as a regional Intermodal Transportation Facility to support both passenger and freight-related air services; replace lost jobs with new and expanded employment opportunities; maximize joint use (military and civilian) opportunities at airport-related land and facilities; and emphasize the development of aviation uses other than federal aviation, such as commercial and/or freight carrier services. Concurrent with development and adoption of the March AFB Redevelopment Project, the U.S. Department of the Air Force (DAF) prepared an Environmental Impact Study for Disposal of a Portion of March AFB, and March JPA and the March Joint Powers Redevelopment Agency prepared an EIR for the March AFB Redevelopment Project. The Redevelopment Project evaluated in the EIR considered the development of approximately 7,250 acres (March Joint Powers Redevelopment Agency 1996b). The area evaluated included 6,782 acres consistent with the boundaries of March ARB at that time, approximately 4,524 acres of which was to be transferred to the authority of March JPA. The remaining 2,258 acres was to stay under the control of the military. Additionally, 467 acres within the City of Moreno Valley was included in the EIR analysis; however, this land remains under the land use and jurisdictional control of the City of Moreno Valley.

In March 1997, March JPA assumed land use control for all surplus property identified and began preparation of a General Plan for the planning area. In 1999, March JPA approved the March JPA General Plan and Master EIR (SCH No. 97071095) for the March JPA planning area, which includes March ARB (March JPA 1999a, 1999b). The 1999 Master EIR evaluated up to 1.44 million square feet of aviation facilities on 316 acres (March JPA 1999b). The General Plan now serves as the land use and development guidance document for development within the March JPA planning area.

On May 7, 1997, DAF and March JPA entered into a Joint Use Agreement to designate March ARB as a joint use airport (March JPA and DAF 1997). DAF defines a “joint use airport” as one where facilities that are owned and operated by DAF are made available for use by civil aviation. The Joint Use Agreement was amended by Amendment 1 on February 21, 2001, and by Amendment 2 on June 20, 2008. Amendments 1 and 2 changed certain conditions for civil aircraft operations and the type of civil aircraft operations authorized at March ARB under the Joint Use Agreement. A new Joint Use Agreement was established on March 14, 2014. The 2014 Joint Use Agreement assigned all of March JPA’s rights and interest under the 1997 Joint Use Agreement to the MIP Airport Authority (MIPAA and DAF 2014). The Joint Use Agreement resulted in a lease for more than 350 acres and established the civilian airport that has since been named March Inland Port (MIP) Airport (MIPAA and DAF 2014). Under the agreement, March JPA and the military entities share essential aviation facilities, such as the control towers and

runways, as well as maintenance of facilities. The MIP Airport is the civilian facility that is managed and operated by the MIP Airport Authority. A land use map depicting the boundaries of March ARB and MIP Airport is shown on Figure 2-4, March Inland Port Airport Boundaries.

The project site was grouped within the Aviation Support area of the March ARB Redevelopment Plan area and is designated as Aviation (AV) under the General Plan Land Use Map (March JPA 1999a). As mentioned in Section 2.1, Project Location, the project site has not been assigned a zoning designation. The project applicant is now pursuing development of the site. The Proposed Project would alleviate congestion and overtaxed air and roadway facilities within the greater region by increasing the utilization of the operational capacity of MIP Airport.

2.3 Project Objectives

The primary objectives of the Proposed Project are as follows:

- More fully utilize the operations capacity of the MIP Airport to meet regional demands for air cargo services within Southern California and the greater region, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region.
- Provide appropriate land use intensities to comply with the parameters of the March ARB/Inland Port Airport Compatibility Plan.
- Avoid impacts to, or impediment of, the remediation of the burn areas within Site 7.
- Provide increased job opportunities for local residents through the provision of employment-generating businesses.
- Improve access to the existing taxiways for airport users.
- Facilitate development of aviation uses other than federal military aviation.

2.4 Proposed Project

2.4.1 Project Components

The Proposed Project would be sited on approximately 46 acres and would consist of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxilane/taxiway and parking improvements, within an approximately 34-acre site within MIP Airport under the jurisdiction of March JPA. The Air Cargo Center Component would also include work in the public right-of-way within Heacock Street on the eastern boundary of the project site. The Off-Site Component would be constructed on approximately 12 acres and would include taxiway and taxilane construction, widening, and realignment; storm-drain extensions; and a perimeter patrol road with security fencing within March ARB.

Due to the federal involvement and approvals necessary for the Off-Site Component and operations of the Air Cargo Center Component, a separate Environmental Assessment document under the National Environmental Policy Act is being prepared for this Project with the Federal Aviation Administration (FAA) as the lead federal agency and DAF as a cooperating agency.

2.4.1.1 Air Cargo Center Component

The Air Cargo Center Component of the Proposed Project would include development of a gateway air cargo center, including the construction of an approximately 180,800-square-foot cargo building with 9 grade-level loading doors, 31 truck dock positions, and 37 trailer storage positions. The cargo building would contain approximately 9,000 square feet of office space. The proposed development plan for the project site is shown on Figure 2-5, Site Plan: Air Cargo Center Component. The cargo building would be constructed to a maximum height of 45 feet, as shown in Figure 2-6, Cargo Building Elevations. The Air Cargo Center Component would be constructed within approximately 34 acres under March JPA jurisdiction. In addition to the cargo building, the Air Cargo Center Component would include construction of a tarmac and parking apron, allowing aircraft to access four proposed aircraft parking gates along the northern side of the cargo building. This would include construction of a new taxiway (Taxilane J) that would provide aircraft access to the existing Taxiway A within March ARB. The Proposed Project would also include an expansion of Taxiway G and construction of a parking apron adjacent to the western boundary of the cargo building, within March JPA land use jurisdiction. This would allow aircraft to access three proposed aircraft parking gates along the western side of the cargo building. The proposed tarmac expansion, the new Taxilane J, and new parking aprons would be sized to accommodate commercial cargo airplanes and would be paved to meet FAA standards. The parking aprons would connect with the existing Taxiways A and G, which would be used by aircraft to access the MIP Airport runway.

Access and Circulation

Construction and development activities within the public right-of-way along Heacock Street within the City of Moreno Valley would include construction of a 225-foot-long right-turn pocket into the existing access roadway along the southbound side of Heacock Street and installation of a traffic signal at the existing access roadway. The proposed work within Heacock Street is shown on Figure 2-5.

Vehicular access to the project site would occur at a new signalized entrance onto Heacock Street, expanding the existing access roadway currently serving the facilities south of the project site. At the intersection, the roadway would be expanded to 60 feet wide with five lanes. There would be dual lanes in, with one lane dedicated to project site access. For exiting, the roadway would have dual left-turn lanes and a single right-turn lane. The remainder of the access roadway to the project site would be expanded to 48 feet wide, with two lanes in each direction. The project site driveway off the access roadway would be constructed to a width of 50 feet to accommodate large trucks and trailers. A total of 122 parking spaces would be available within the project site. A gated entry/exit point would be installed where the driveway meets the truck dock and trailer storage areas along the southern portion of the cargo building. To avoid a conflict with aircraft parking stations constructed adjacent to the western boundary of the cargo building, an existing service road east of Taxiway G and south of Taxiway A would be demolished and replaced with a realigned, striped service road.

Three military cleanup cases, including a subarea known as Site 7, are located adjacent to the project site, as shown on Figure 2-5. A portion of Site 7 is already occupied by existing development (which would not be disturbed). The Proposed Project would leave the portion of Site 7 that includes the burn areas undisturbed. As part of construction of the Proposed Project, expansion of the existing access roadway to the south of the project site would slightly overlap with Site 7; however, it would avoid the burn areas within Site 7.

Utilities

On-site trenching and construction of new utility lines would occur that would connect with existing water, wastewater, storm drain, natural gas, and electrical facilities surrounding the project site, as shown on Figures 2-7a and 2-7b, Stormwater Infrastructure Plan; and Figure 2-8, Water and Sewer Infrastructure Plan.

An on-site storm drain network would be constructed with approximately 91,300 cubic feet of underground detention basins to provide storage for required stormwater runoff treatment prior to discharge to the backbone storm drain system at an allowable discharge rate.

Landscaping and Fencing

The Proposed Project would include landscaped areas at the project site entrance from the access roadway and on small islands in the two employee parking lots that would be compatible with FAA regulations, as well as the Wildlife Hazard Review prepared for the Proposed Project (Appendix J-3), for landscaping in flight paths. Any proposed landscaping would exceed the minimum setback requirements. Landscaping would include two areas of non-native hydroseed totaling 137,381 square feet (refer to Figure 2-9, Landscape Plan). As required by Chapter 9.17 of the March JPA Development Code (March JPA 2016) and the recommendations in the Wildlife Hazard Review prepared for the Proposed Project, the native hydroseed mix would consist of a drought-tolerant native grass and forb mix, specifically small fescue (*Festuca microstachys*). Along the project site's northern boundary, a 14-foot-high fence compliant with Department of Defense regulations and requirements would be installed. Along the project site's southern boundary and along the site access roadway, a 10-foot-tall tube steel fence would be installed. A 12-foot-tall concrete masonry unit wall would be installed in the interior of the site to separate Site 7 from areas within the project site accessible to trucks and employees.

Building Materials and Lighting

The proposed cargo building includes materials for exterior building systems that are non-reflective, including ductwork and roof. The Proposed Project would not include solar panels due to the project site's proximity to the March ARB runway. The structure would include stucco-clad, tilt-up concrete panels that are not reflective. The color palette for the building consists of neutral tones, with off-white, light-grey, and taupe coloring. Windows for the cargo building would primarily be along the east elevation facing Heacock Street, as shown on Figure 2-6. Window glazing would have a 25% maximum allowable reflectance.

The Proposed Project would include a lighting plan that provides the type, location, and lighting standards for the truck and car parking lot lighting and outdoor lighting for the cargo building. Lighting would be provided along the internal roadway, in the employee parking lot, along the perimeter of the cargo building, and in the truck stall parking area along the southern boundary of the project site. Lighting within the site would operate at a maximum of 2,700 kelvin and a maximum of 750 watts. The proposed lighting would contain full cut-off fixtures and would be constructed to a maximum height of 25 feet above finished grade. Refer to Section 3.1, Aesthetics, for further detail.

2.4.1.2 Off-Site Component

The Off-Site Component of the Proposed Project would be situated on approximately 12 acres and would include construction of Proposed Project features on land owned by March ARB. Development occurring on March ARB would require easements from DAF within five work areas, identified as Work Areas 1–5; refer to Figure 2-10, Off-Site Component Development Plan.

Development and construction activity within the five work areas would consist of the following:

- **Work Area 1:** Construction of a 50-foot-wide perimeter access roadway running along the northern and northwestern boundaries of the project site that would connect with the existing access roadway on the eastern and western ends of the constructed access roadway; replacement of an existing chain-link fence with a security fence.
- **Work Area 2:** Construction of a headwall and inlet apron for a storm drain culvert; extension of a dual 36-inch-diameter storm drain backbone via jack-and-bore tunneling under Taxiway A to replace the existing silt-filled culvert; connection of the culvert to the storm drain extension.
- **Work Area 3:** Reconfiguration of the Taxiway A to Taxilane J transition to allow aircraft access to the proposed cargo building. Portions of Taxiway A would be demolished and reconstructed to allow the taxiway to connect with the proposed Taxilane J within the project site.
- **Work Area 4:** Removal of an existing inverted culvert apron outlet; cleaning of the existing 36-inch-diameter culvert; extension of the existing single 36-inch-diameter storm drain under Taxiway A via jack-and-bore to connect to the culvert.
- **Work Area 5:** Reconstruction and realignment of the intersection of Taxiway A and Taxiway G. This would result in a widened entryway for aircraft to turn from Taxiway A to Taxiway G and would accommodate aircraft access to the aircraft parking stations along the western boundary of the cargo building.

An access and construction easement from DAF would be required to complete the proposed work within Work Areas 1–5. A permanent maintenance access easement from DAF would be required for Work Areas 2–5. A permanent operations easement from DAF would be required for Work Areas 3 and 5. Because the Proposed Project would require construction and alteration of the March ARB taxiways and taxilanes, the project applicant is required to submit FAA Form 7406-1 – Notice of Proposed Construction or Alteration.

2.4.2 Project Operations

Once constructed, the Proposed Project is anticipated to average 17 flights per day, 6 days a week (non-peak), as shown in Table 2-1.¹ Generally, arrivals would occur in the early morning hours and departures would occur in the late evening hours. Arriving aircraft would approach from the southeast on Runway 32, over non-residential land uses. During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 flights per day, 6 days per week, over a 4-week period; however, the maximum annual aircraft operations for the Proposed Project would not exceed the currently available civilian air cargo operations capacity under the Joint Use Agreement.² Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of Proposed Project's proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).³ The Proposed Project operations would require one additional traffic controller. Because there is no proposed tenant at this time, the proposed flight operations scenarios reflect a fleet consisting of Boeing 767-300 aircraft, which is a typical plane utilized in air cargo operations. As a condition of approval, prior to issuance of a certificate of occupancy, analysis of the ultimate tenant's aircraft fleet mix (i.e., emissions, fueling requirements, noise) shall be reviewed by March JPA for conformance with this EIR; non-conformance may require additional CEQA review.

¹ Each flight includes two operations: an arrival and a departure.

² The current capacity of annual civilian air cargo operations is approximately 21,000 flight operations.

³ Day operations would occur between 7:00 a.m. and 7:00 p.m., evening operations would occur from 7:00 p.m. to 10:00 p.m., and night operations would occur from 10:00 p.m. to 11:00 p.m.

Table 2-1. Proposed Aircraft Operations

Average Daily Arrivals (Non-Peak)			Average Daily Departures (Non-Peak)			Average Daily Arrivals (Peak)			Average Daily Departures (Peak)			Total Average Daily Flights ^a (Non-Peak)	Total Average Daily Flights ^a (Peak)	Total Annual Operations ^b
D	E	N	D	E	N	D	E	N	D	E	N			
14	3	0	3	12	2 ^c	15	7	0	7	13	2	17	22	10,608

Notes: D = day (7:00 a.m. – 7:00 p.m.); E = evening (7:00 p.m. – 10:00 p.m.); N = night (10:00 p.m. – 11:00 p.m.).

^a Each flight includes two operations: an arrival and a departure.

^b Operations include counting arrivals and departures separately; there are two operations (arrival and a departure) for each flight.

^c This represents an overstatement of the average daily nighttime aircraft operations during non-peak hours, which is approximately 1.6 aircraft operations.

Refueling of aircraft that would use the proposed facilities would occur on site. Aircraft fuel would be trucked from the existing off-site March JPA aircraft fuel farm, which currently consists of two aboveground jet fuel storage tanks with a total fuel capacity of 210,000 gallons. Freeman Holdings Group, the current operator of the March JPA aircraft fuel farm, has stated there is sufficient fuel capacity to serve the Proposed Project during both Non-Peak and Peak seasons (Appendix O).

Upon arrival, the air freight cargo would be transferred from the planes to the cargo building, where the air cargo would be placed onto trucks and conveyed to distribution centers; this process would also occur in reverse, from a distribution center to the cargo building. The cargo building would serve as a passthrough for air freight cargo; therefore, there would be no storage, including cold storage. The cargo building would provide an area for mobile maintenance equipment for planes and trucks. All maintenance activities would occur within the proposed tarmac areas on the project site. A portable wash rack for ground support and maintenance equipment would be available in the cargo building. Water from the wash rack would be routed through a grease removal/trap system inside the cargo building before discharging to the sanitary sewer. In the event that emergency maintenance is needed, the cargo building would have the capability to provide service for a plane.⁴

2.4.3 Project Demolition, Grading, and Construction

The Proposed Project requires expansion and modification of the existing southern access roadway, which currently crosses Site 7. Approximately 171,300 square feet of existing tarmac along the shoulder of Taxiway A and Taxiway G would be demolished to provide a taxiway and tarmac expansion to accommodate aircraft access to the proposed cargo building. In addition, the former fire house building located at the southwest corner of the project site would be demolished, along with some accessory roadway and tarmac areas surrounding the fire house. Any applicable permits would be obtained prior to demolition of existing structures on the project site. Grading and preparation of the site is anticipated to require approximately 100,000 cubic yards of imported soil. During construction of the Proposed Project, excavation would occur up to a depth of approximately 8 to 10 feet below ground surface.

For purposes of analysis in this EIR, the Proposed Project construction was assumed to occur over an approximately 10-month period, commencing in June 2025 and ending in March 2026, as shown in Table 2-2. Generally, construction activities would include site preparation, grading, and facilities construction. The construction schedule used in the technical analysis represents a conservative analysis scenario, with construction occurring

⁴ *Emergency service* includes delivering and replacing parts, such as an engine, so that the aircraft can fly to a hub where it can receive full emergency repairs and maintenance.

from June 2023 and completed in March 2024, because emission factors for construction decrease as time passes due to emission regulations becoming more stringent.⁵ The duration of construction activity and the associated equipment (which is shown in Table 2-3) represent a reasonable approximation of the expected construction fleet as required per CEQA. Opening year was assumed to be 2026.

Table 2-2. Construction Schedule

Phase Name	Start Date	End Date	Days
Site preparation, including demolition	06/01/2025	06/23/2025	17
Grading	07/01/2025	08/15/2025	32
Building construction	08/01/2025	02/28/2026	152
Paving	12/01/2026	01/30/2026	43
Architectural coating	02/15/2026	03/30/2026	32

Table 2-3. Construction Equipment Assumptions

Activity	Equipment	Amount	Hours per Day	Horsepower	Load Factor
Site preparation, including demolition	Crawler tractors	2	8	212	0.43
	Concrete/industrial saws	1	8	81	0.73
	Excavators	3	8	158	0.38
	Rubber-tired dozers	3	8	247	0.40
Grading	Crawler tractors	1	8	212	0.43
	Excavators	2	8	158	0.38
	Graders	3	8	187	0.41
	Rubber-tired dozers	1	8	247	0.40
	Scrapers	2	8	367	0.48
Building construction	Cranes	1	8	231	0.29
	Crawler tractors	3	8	212	0.43
	Forklifts	3	8	89	0.20
	Generator sets	1	8	84	0.74
	Welders	1	8	46	0.45
Paving	Pavers	2	8	130	0.42
	Paving equipment	2	8	132	0.36
	Rollers	2	8	80	0.38
Architectural coating	Air compressors	1	8	78	0.48

Note: To account for fugitive dust emissions associated with site preparation and grading activities, crawler tractors were used in lieu of tractors/loaders/backhoes.

Site preparation, including demolition, and grading would last approximately 49 days, and facilities construction, including paving and architectural coating, would occur over an approximately 8-month period. Heavy equipment to be used on site during construction would include flatbed trucks, dozers, scrapers, graders, track hoes, dump trucks, forklifts, cranes, cement trucks, pavers, rollers, water trucks, rolling container trucks, and Bobcats (small,

⁵ As shown in the California Emissions Estimator Model (CalEEMod) User’s Guide Version 2022.1, Section 4.3, OFFROAD Equipment, as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer, less-polluting equipment and new regulatory requirements (CAPCOA 2022).

versatile excavators). Heavy equipment would be delivered to and removed from the site throughout the construction phase. Because heavy equipment is typically not authorized to be driven on public roadways, most of the equipment would be delivered to and removed from the project site using large flatbed trucks. It is anticipated that delivery of heavy equipment would not occur daily, but rather periodically throughout the construction phase based on need.

The construction fleet may vary due to specific Proposed Project needs at the time of construction. The associated construction equipment was generally based on the California Emissions Estimator Model (CalEEMod) Version 2022.1 defaults. A detailed summary of construction equipment assumptions by phase is provided in Table 2-3.

March JPA has established limits to the hours of construction. Section 9.10.030 of the March JPA Development Code states that noise-generating construction activities may only occur between 7:00 a.m. and 7:00 p.m. (March JPA 2016). However, the identified construction equipment would not be used during every hour of the day. Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 2-3 would operate up to a total of 8 hours per day, or approximately two-thirds of the period during which construction activities are allowed pursuant to the March JPA Development Code. Most pieces of equipment would likely operate fewer hours per day.

2.4.4 Project Design Features

The following Project Design Feature (PDF) has been incorporated into the Proposed Project and analysis throughout this EIR. The PDF is also provided in Section 3.12, Transportation. Although this PDF is already part of the Proposed Project, it will also be included as a separate condition of approval and included in the Mitigation Monitoring and Reporting Program (MMRP). March JPA will monitor compliance through the MMRP.

PDF-TRA-1 Payment of Fair-Share Cost. To address operational deficiencies at off-site intersections, prior to the issuance of a certificate of occupancy, the Proposed Project shall contribute \$281,498 (with Heacock Street Extension) as its fair share toward the improvement measures provided in Table 1-5, Summary of Improvements and Rough Order of Magnitude Costs – with Heacock Street Extension, of the Traffic Analysis (Appendix M-1 to this EIR).

2.5 California Environmental Quality Act

The baseline for a project is typically the physical environmental condition that exists in the vicinity of a project when the Notice of Preparation is published (CEQA Guidelines Section 15125[a]). The Notice of Preparation for the Proposed Project was published on March 31, 2021, which is the environmental baseline for analysis for the Proposed Project. Currently, existing development within the site consists of one groundwater monitoring well (OU1MW14) (located in the northeast portion of the project site), a former (now vacant) fire house, a paved taxiway and tarmac area associated with aviation uses, and various paved improvements located next to the existing taxiways. Although the project site contains some existing development, most of the site consists of vacant and undeveloped land, as shown in Figure 2-1.

This EIR was prepared by the March JPA, as lead agency, to inform decision makers and the public of the potential significant environmental effects associated with the Proposed Project. This EIR was prepared in accordance with CEQA (California Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.), published by the Public Resources Agency of the State of California. The Proposed Project will also be evaluated in

a separate environmental document pursuant to the National Environmental Policy Act, with FAA as the lead federal agency and DAF as a cooperating agency.

The purpose of this EIR is to identify the potential effects on the environment from the Proposed Project that the lead agency has determined may be significant. In addition, feasible mitigation measures are recommended, when applicable, that could reduce or avoid significant environmental impacts.

2.6 Discretionary Actions

2.6.1 Requested Approvals and Entitlements

To facilitate Proposed Project approval, the following would be required. Details for each component are provided below.

- **Zoning Designation:** The project site has not previously been assigned a zoning designation; therefore, to be consistent with the current March JPA General Plan land use designation of Aviation (AV), the Proposed Project is requesting a zoning designation of Aviation (A) for the approximately 34-acre Air Cargo Center Component.
- **Plot Plan:** Concurrent with the requested zoning designation, the Proposed Project is requesting approval of a Plot Plan Application to allow construction of the following within March JPA jurisdiction:
 - An approximately 180,800-square-foot cargo building with 9 grade-level loading doors and 31 dock positions, parking aprons sufficient to support commercial cargo airplanes, 37 trailer storage positions, and 122 stalls for employee parking.
 - An expansion of the existing taxiways/tarmac.
 - Construction of stormwater facilities, including an underground detention basin.
 - Expansion of the existing access roadway and a signalized entrance onto Heacock Street.
 - Utility connections within existing access roadway and Heacock Street, including water, sewer, electrical, and gas.

2.6.2 Other Discretionary Approvals

The additional permits, approvals, and discretionary actions shown in Table 2-4 may be necessary to implement the Proposed Project.

Table 2-4. Permits, Approvals, and Discretionary Actions of Other Federal, State, and Local Agencies

Agency	Permit
Federal	
Federal Aviation Administration	Approval of Environmental Assessment prepared per the National Environmental Policy Act; approval of the Airport Layout Plan update
Department of the Air Force	Approval of Environmental Assessment prepared per the National Environmental Policy Act
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit

Table 2-4. Permits, Approvals, and Discretionary Actions of Other Federal, State, and Local Agencies

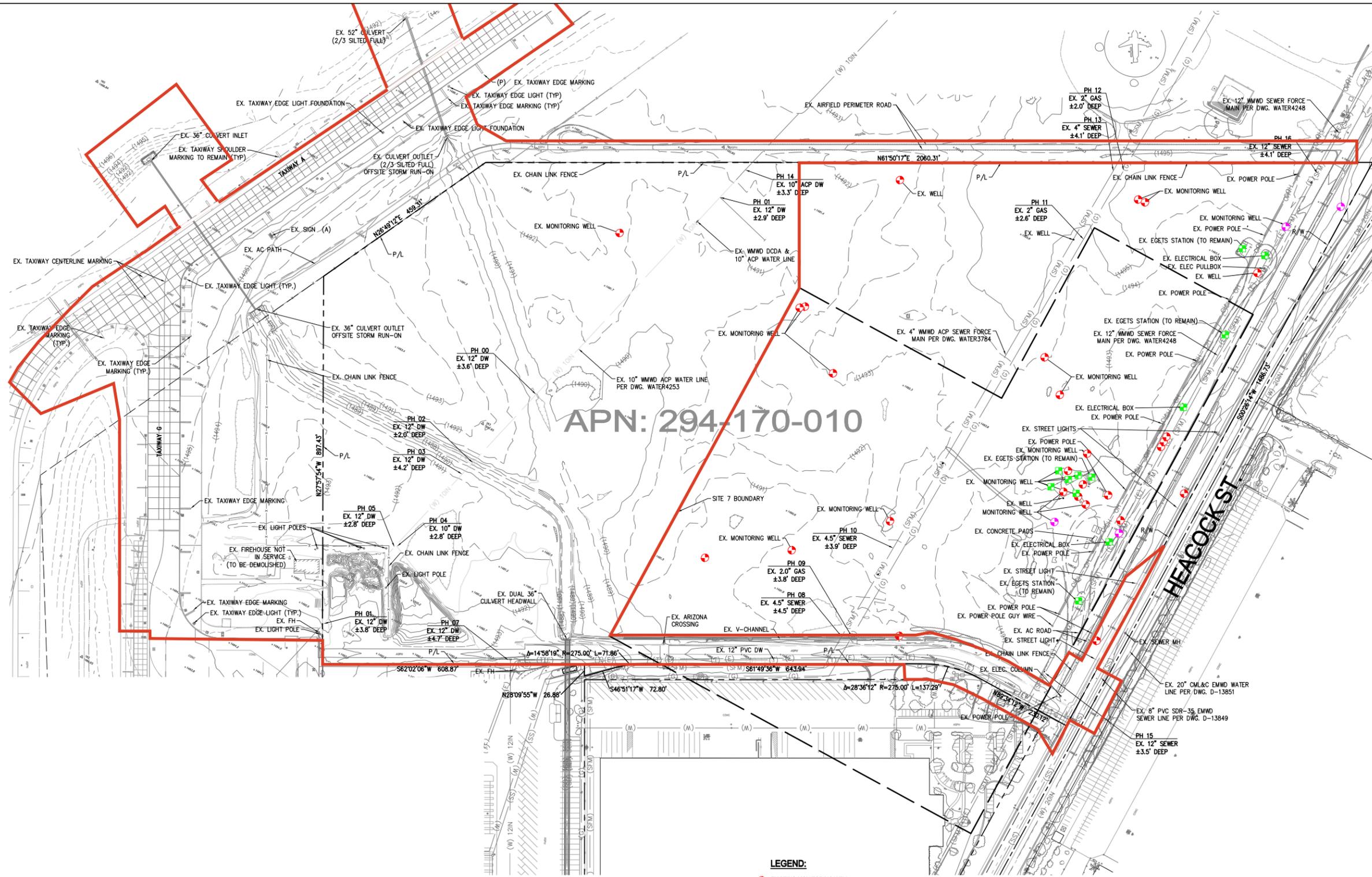
Agency	Permit
March Air Reserve Base	Approval of the tarmac expansion and necessary easements for Work Areas 1-5
State or Regional	
State Water Resources Control Board	National Pollutant Discharge Elimination System Construction General Permit, which would include a stormwater pollution prevention plan
California Department of Fish and Wildlife	California Fish and Game Code Section 1600 Streambed Alteration Agreement
California Department of Toxic Substances Control	Notification prior to construction for (1) approval of the project under the Environmental Restrictive Covenant and (2) approval of the hazardous materials contingency plan
Regional Water Quality Control Board, Santa Ana Region	401 Water Quality Certification or a Waste Discharge Requirement Permit (401 needed if a U.S. Army Corps of Engineers Section 404 Nationwide Permit is needed)
Local	
Riverside County Airport Land Use Commission	Consistency finding with the March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan
City of Moreno Valley	A traffic control plan if Project construction restricts traffic on Heacock Street and permits for road closures

2.7 References Cited

- CAPCOA (California Air Pollution Control Officers Association). 2022. *CalEEMod California Emissions Estimator Model User's Guide Version 2022.1*. Prepared for CAPCOA by ICF in collaboration with Sacramento Metropolitan Air Quality Management District, Fehr & Peers, STI, and Ramboll. April 2022. <https://www.caleemod.com/user-guide>.
- March Joint Powers Redevelopment Agency. 1996a. *Redevelopment Plan for the March Air Force Base Redevelopment Project*. June 1996. Accessed April 27, 2020. https://www.marchjpa.com/documents/docs_forms/redevelopment_1996.pdf.
- March Joint Powers Redevelopment Agency. 1996b. *Environmental Impact Report for the March Air Force Base Redevelopment Project*. Final. SCH No. 96031022. June 1996.
- March JPA (Joint Powers Authority). 1999a. *General Plan of the March Joint Powers Authority*. https://marchjpa.com/wp-content/uploads/2023/02/General-Plan_2023.pdf.
- March JPA. 1999b. *Master Environmental Impact Report for the General Plan of the March Joint Powers Authority*. Final. SCH No. 97071095. September 1999. http://www.marchjpa.com/docs_forms/eir.pdf.
- March JPA. 2016. *March Joint Powers Authority Development Code*. August 12, 2016. https://www.marchjpa.com/documents/docs_forms/development_code_2016.pdf.

March JPA and DAF (March Joint Powers Authority and U.S. Department of the Air Force). 1997. *Joint Use Agreement between the March Joint Powers Authority and the United States Air Force*. May 7, 1997; amended February 21, 2001, and June 20, 2008. https://www.marchjpa.com/documents/docs_forms/joint_use_agreement.pdf.

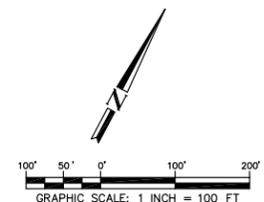
MIPAA and DAF (March Inland Port Airport Authority and the U.S. Department of the Air Force). 2014. *Joint Use Agreement between the March Inland Port Airport Authority and the United States Air Force*. March 19, 2014.



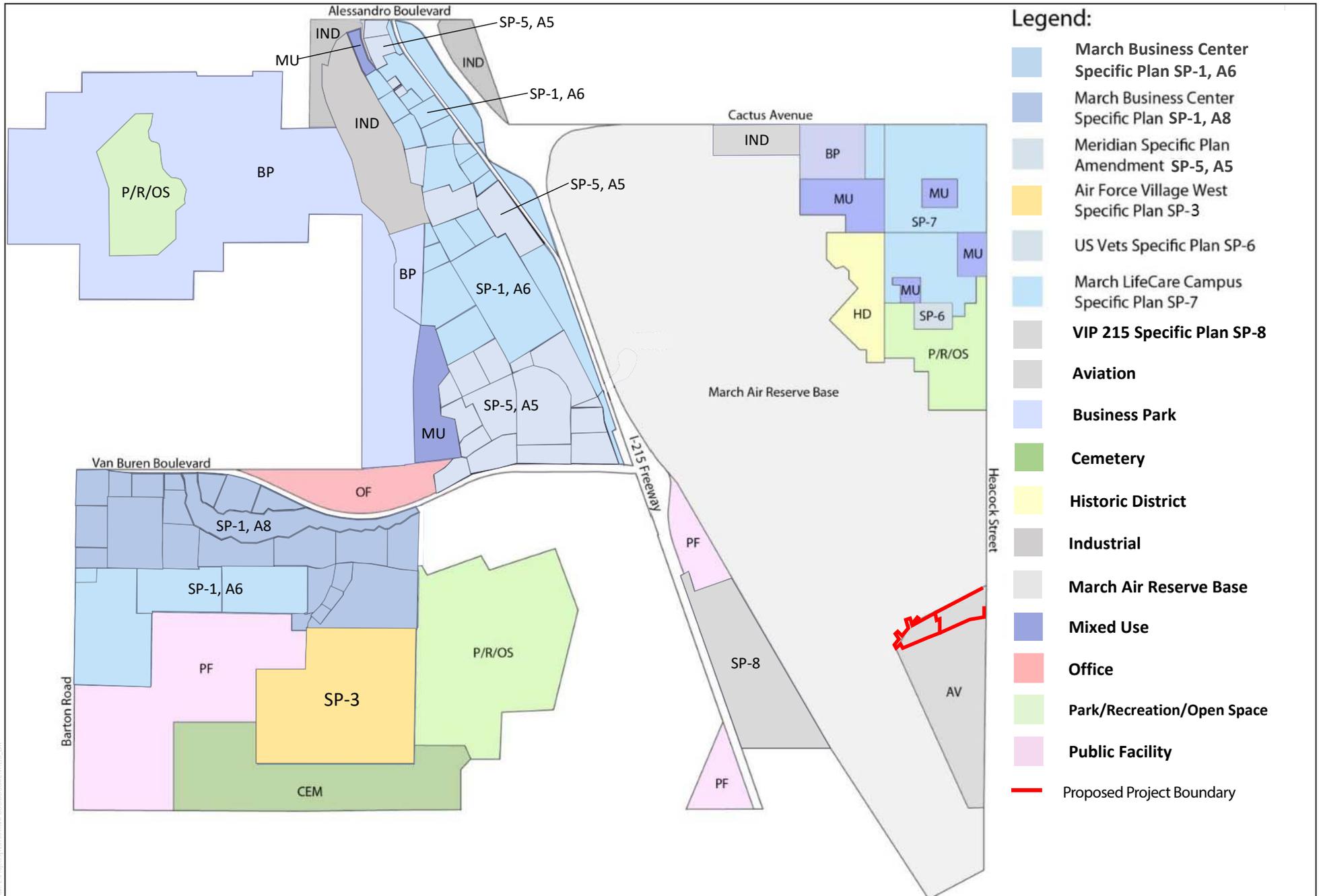
APN: 294-170-010

LEGEND:

- EXISTING MONITORING WELL
- EXISTING EXTRACTION WELL
- NOTE: ALL WELLS SHOWN HEREON WITHIN PROPOSED SITE DEVELOPMENT WILL BE REMOVED, RELOCATED, AND/OR ADJUSTED TO GRADE PER SEPARATE PLAN & PERMIT PROCESS.
- PROPERTY LINE
- SITE 7 AS DEFINED DOCUMENT 2007-0875898
- STREET CENTERLINE
- PROJECT BOUNDARY



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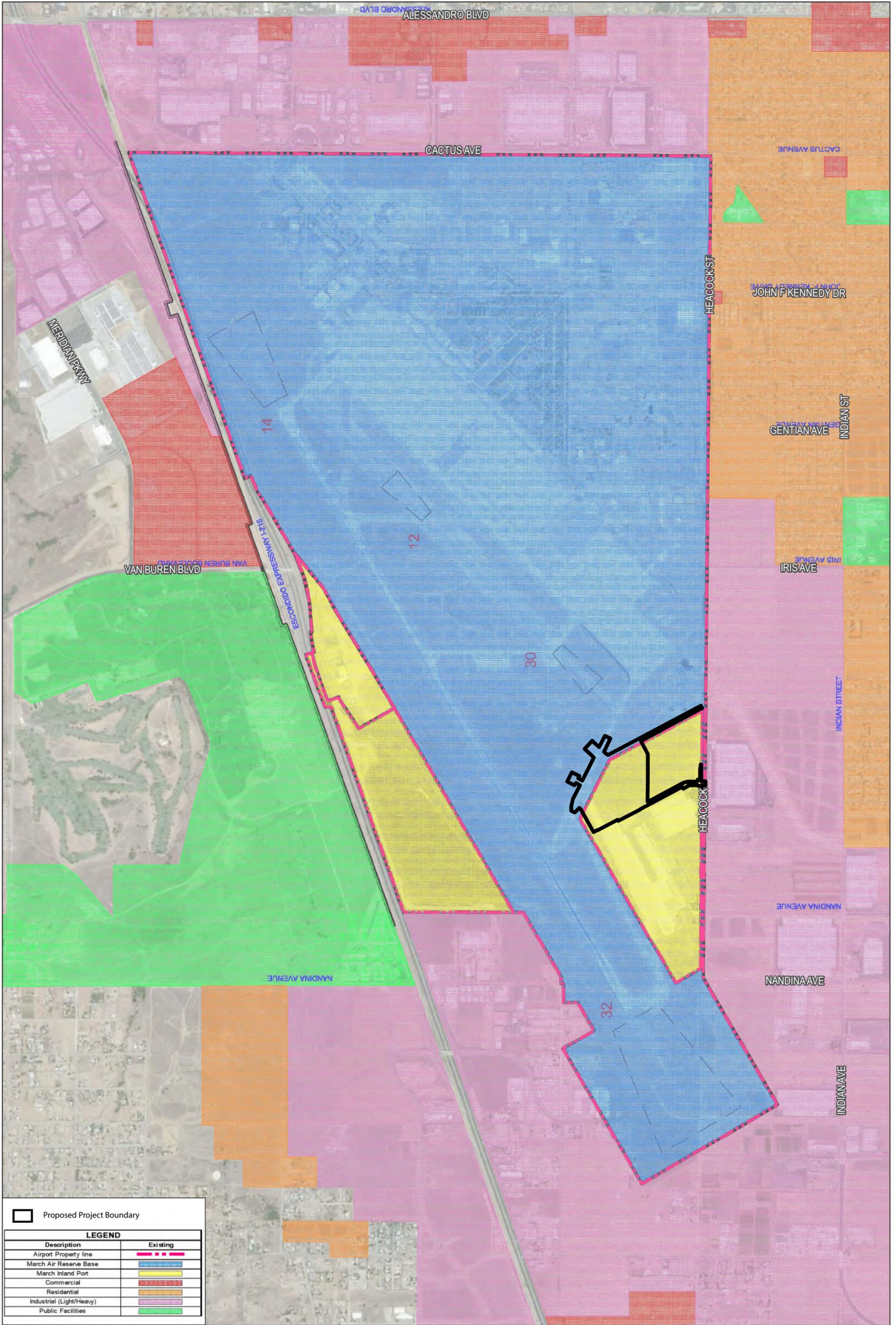


- Legend:**
- March Business Center Specific Plan SP-1, A6
 - March Business Center Specific Plan SP-1, A8
 - Meridian Specific Plan Amendment SP-5, A5
 - Air Force Village West Specific Plan SP-3
 - US Vets Specific Plan SP-6
 - March LifeCare Campus Specific Plan SP-7
 - VIP 215 Specific Plan SP-8
 - Aviation
 - Business Park
 - Cemetery
 - Historic District
 - Industrial
 - March Air Reserve Base
 - Mixed Use
 - Office
 - Park/Recreation/Open Space
 - Public Facility
 - Proposed Project Boundary

SOURCE: March Joint Powers Authority (2023-03-07)

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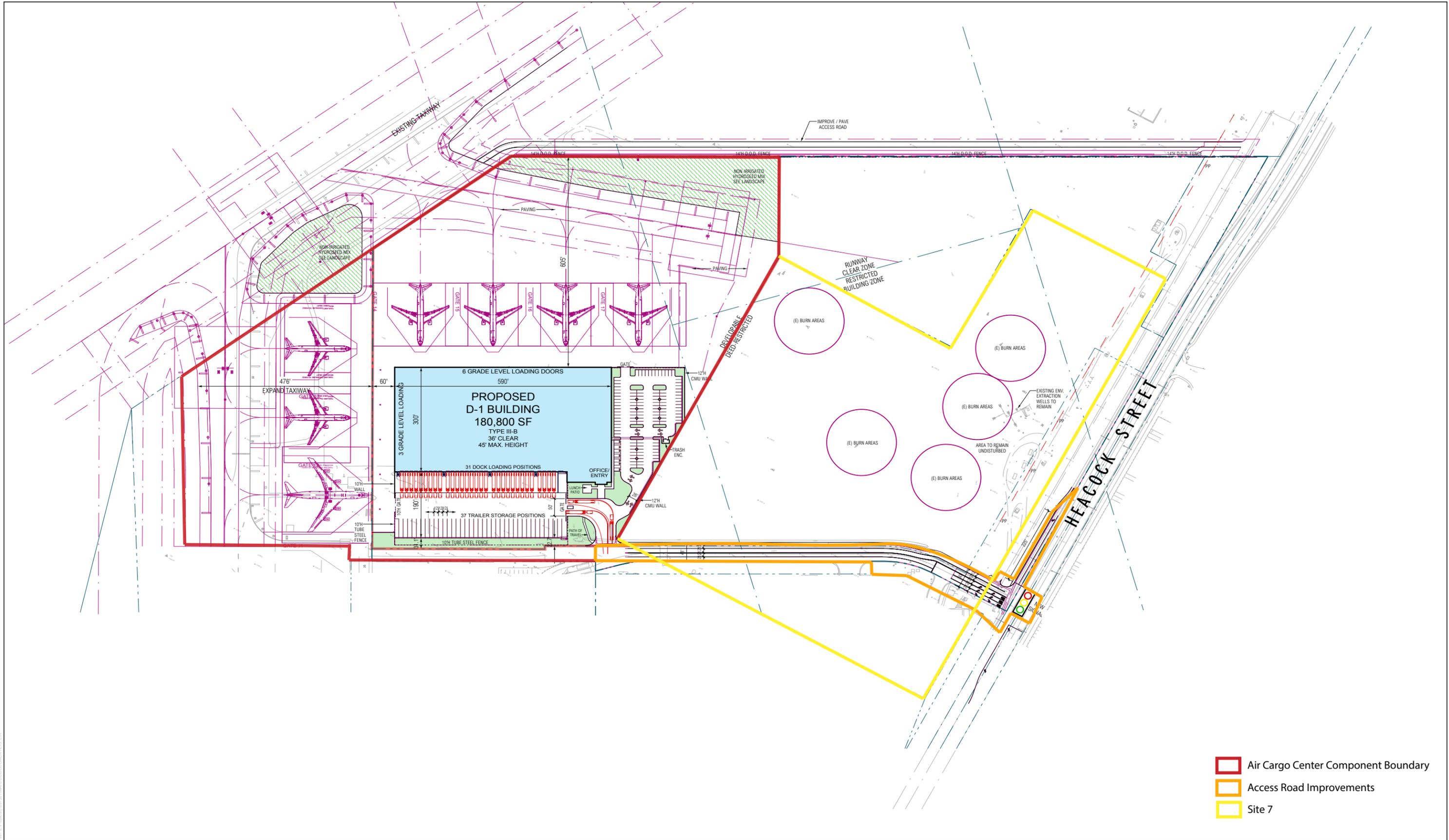


SOURCE: C&S Engineers 2013
 Land use data based from the Riverside County GIS system
 and the City of Moreno Valley Land Use Map

DUDEK 0 800 1,600 Feet

FIGURE 2-4
 March Inland Port Airport Boundaries
 Meridian D-1 Gateway Aviation Center Project

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- ▭ Air Cargo Center Component Boundary
- ▭ Access Road Improvements
- ▭ Site 7

SOURCE: RGA 2022

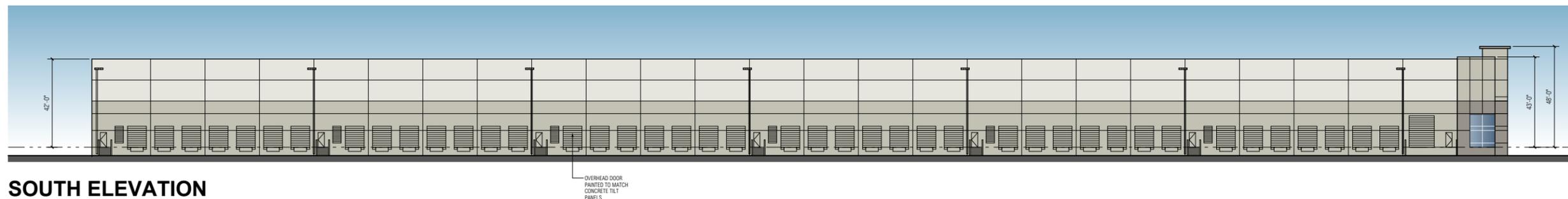
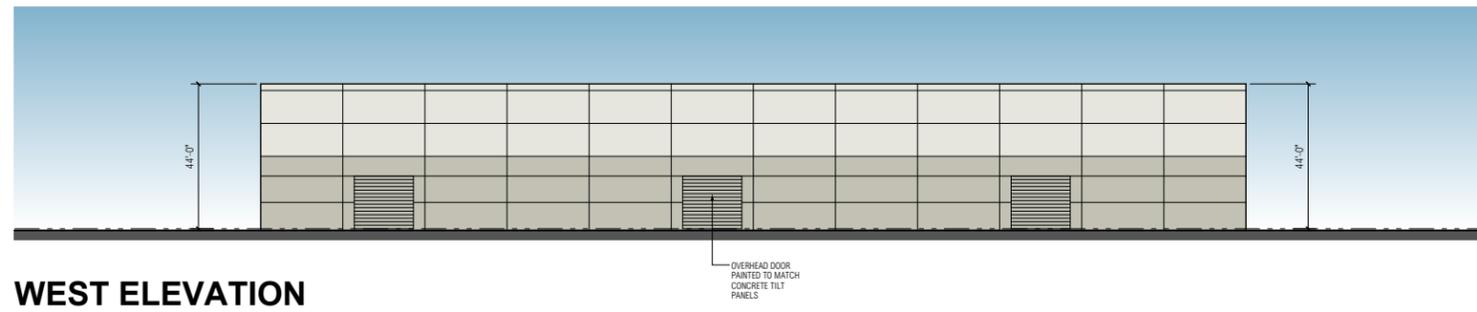
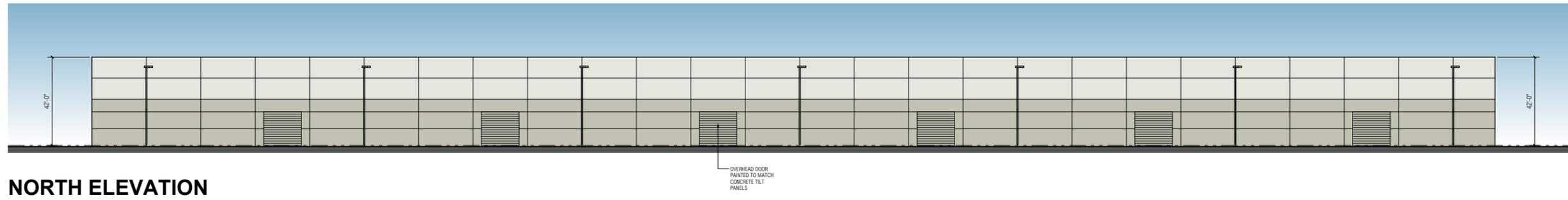
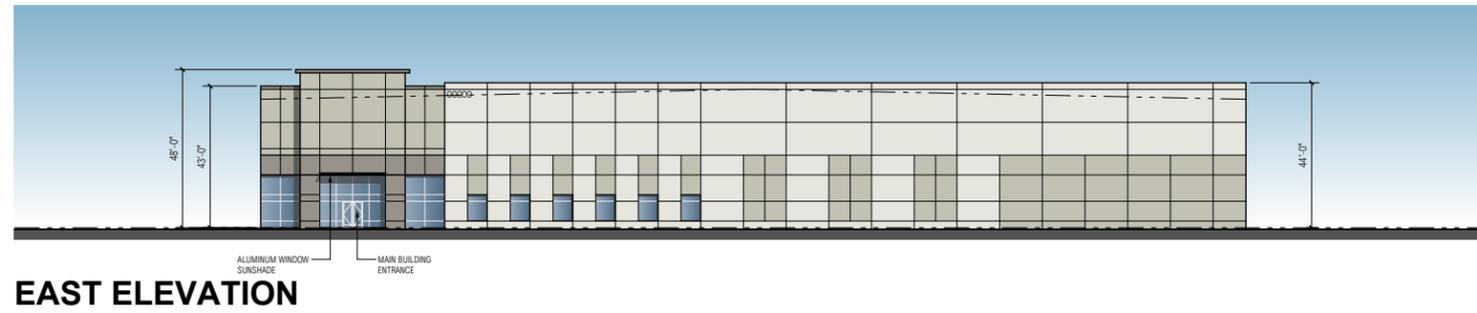


FIGURE 2-5
 Site Plan: Air Cargo Center Component
 Meridian D-1 Gateway Aviation Center Project

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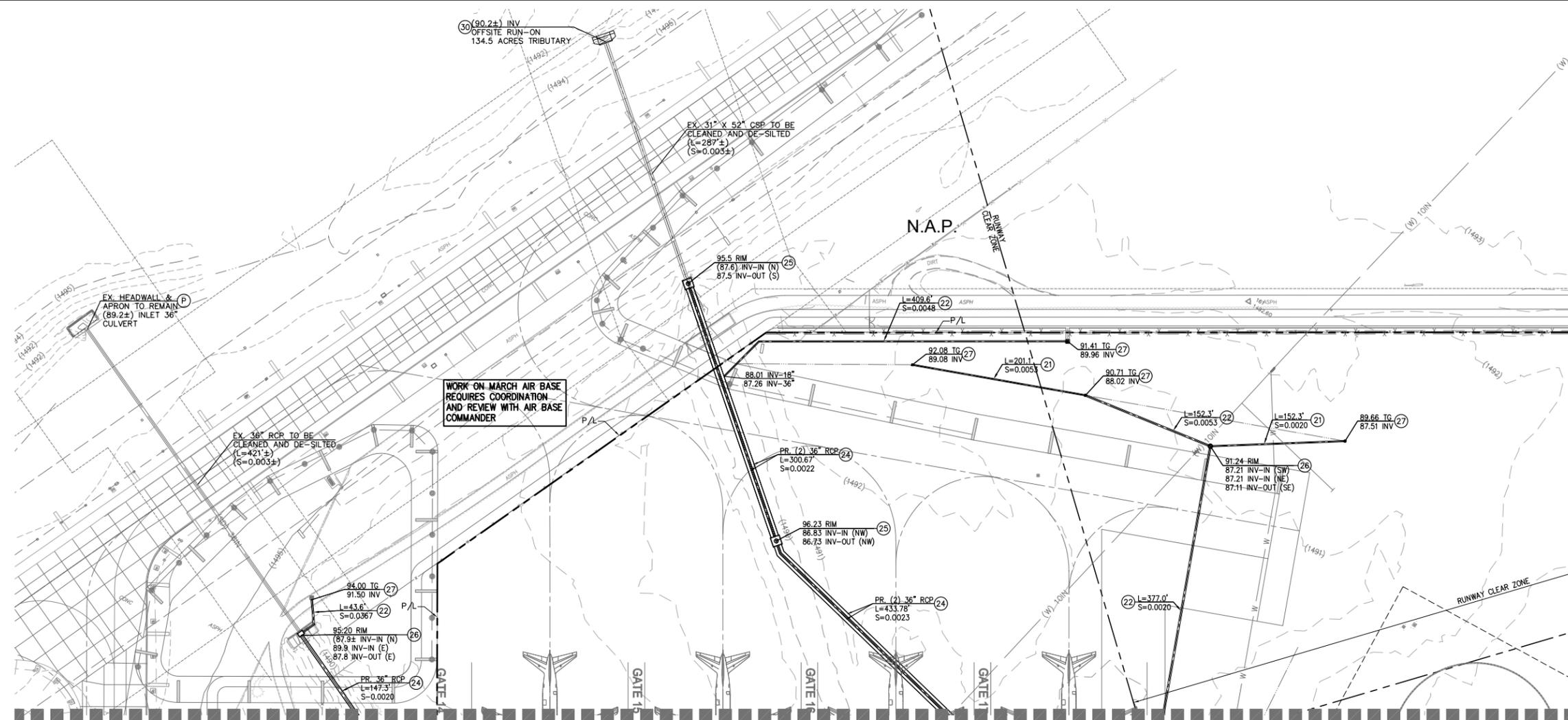
FINISH SCHEDULE

1. FIELD COLOR: SHERWIN WILLIAMS SW 9173 SHITAKE
2. ACCENT COLOR: SHERWIN WILLIAMS SW 7507 STONE LION
3. BASE COLOR: SHERWIN WILLIAMS SW 7508 TAVERN TAUPE
4. GLAZING: PPG SOLARCOOL PACIFICA IN CLEAR ANODIZED ALUMINUM STOREFRONT. THE MAXIMUM ALLOWABLE REFLECTANCE OF GLASS SHALL BE 25%.



SCALE: 1" = 20'-0"

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NOTE:
STORM DRAIN VIDEO SHALL BE SUBMITTED TO THE M.J.P.A PUBLIC WORKS ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PAVEMENT CAPPING OR CONCRETING.

NOTE:
ON-SITE STORM DRAINAGE FACILITIES SHALL BE PRIVATELY MAINTAINED.

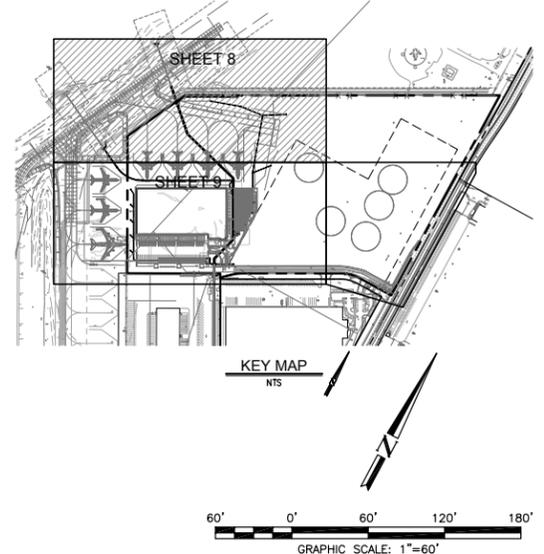
NOTE:
THE ONSITE WQMP SYSTEM/EQUIPMENT SHALL BE INSPECTED AND CERTIFIED BY M.J.P.A

NOTE:
CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, BEDDING, BACKFILL AND ALL CONSTRUCTION COSTS RELATED TO INSTALLATION OF PIPE TO MEET MANUFACTURER'S INSTALLATION RECOMMENDATIONS AND GEOTECHNICAL RECOMMENDATIONS BASED UPON CONDITIONS SPECIFIC TO THIS PROJECT AND CONTRACTOR PRODUCT SUBMITTAL APPROVED BY CIVIL ENGINEER.

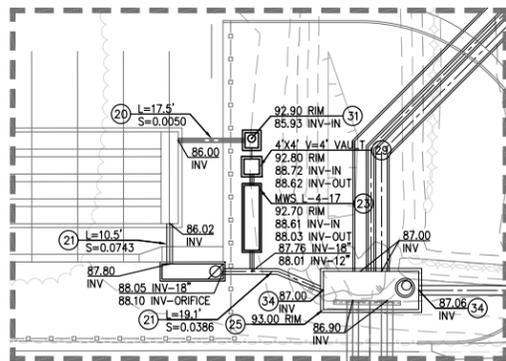
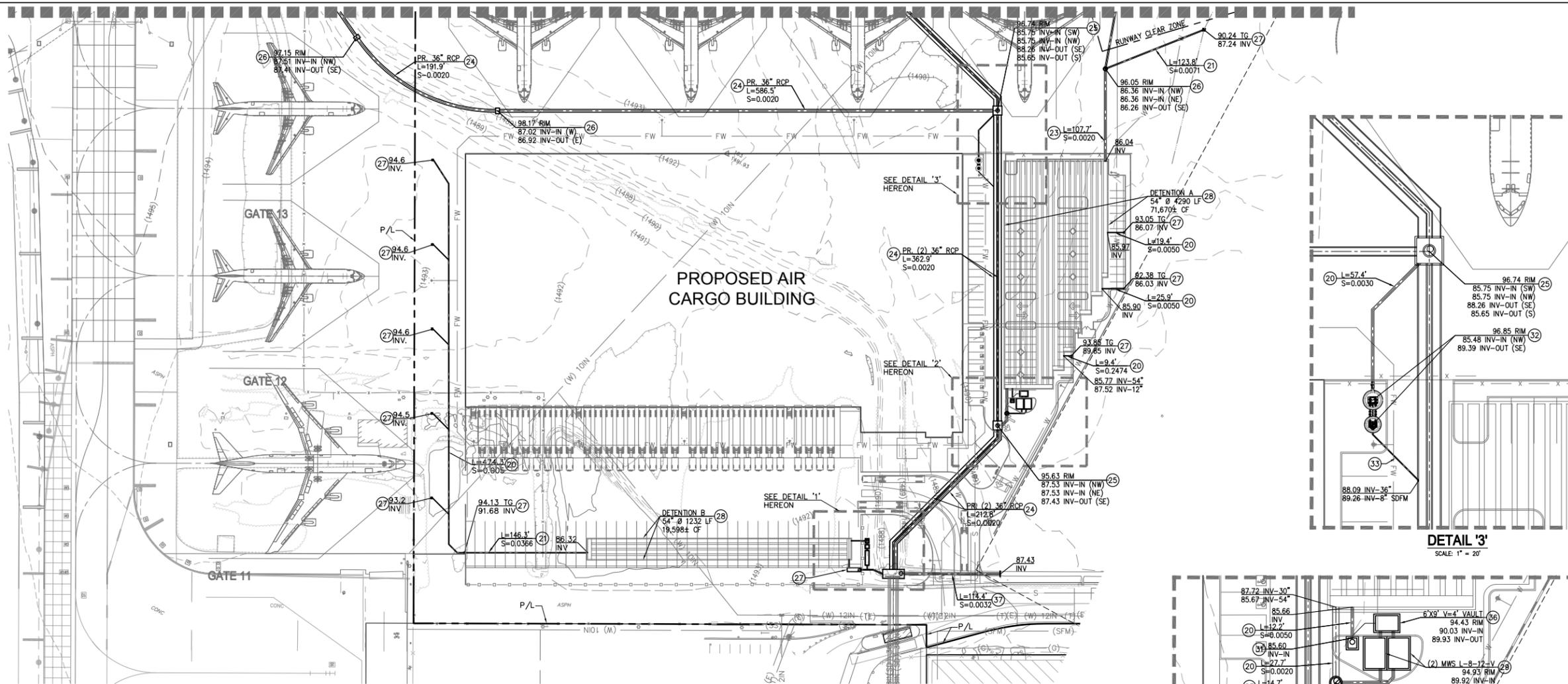
FOR THE UNDERGROUND STORAGE SYSTEM CONTRACTOR CAN PROPOSE ALTERNATE PIPE MATERIALS/LAYOUT PENDING APPROVAL BY OWNER, ENGINEER AND M.J.P.A. CONTRACTOR IS RESPONSIBLE FOR FUNDING ANY POTENTIAL AGENCY FEES FOR REVIEW/APPROVAL OF AN ALTERNATE SYSTEM AND FOR COST OF ENGINEER DESIGN REVIEW/PLAN MODIFICATION. PLEASE NOTE THAT ALTERNATIVE PRODUCTS/LAYOUTS WILL NEED TO MEET OR EXCEED STORAGE CAPACITY; STRUCTURAL CAPACITY AND HYDRAULIC PERFORMANCE AS DETERMINED BY ENGINEER TO BE DEEMED ACCEPTABLE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH PROPOSED DESIGN ALTERNATIVE (FOR EXAMPLE REMOVAL OF BEDROCK DURING EXCAVATION OF ALTERNATE LAYOUT). CONTRACTOR IS ALSO RESPONSIBLE FOR TIME REQUIRED FOR REVIEW AND PROCESSING OF ALTERNATE DESIGN.

CONSTRUCTION NOTES:

- 20 INSTALL 12" HDPE STORM DRAIN PIPE (WATERTIGHT JOINTS WITH BENDS & FITTINGS AS REQUIRED), TRENCH AND BEDDING PER STANDARD DETAILS
- 21 INSTALL 18" HDPE STORM DRAIN PIPE (WATERTIGHT JOINTS WITH BENDS & FITTINGS AS REQUIRED), TRENCH AND BEDDING PER STANDARD DETAILS
- 22 INSTALL 24" HDPE STORM DRAIN PIPE (WATERTIGHT JOINTS WITH BENDS & FITTINGS AS REQUIRED), TRENCH AND BEDDING PER STANDARD DETAILS
- 23 INSTALL 30" HDPE STORM DRAIN PIPE (WATERTIGHT JOINTS WITH BENDS & FITTINGS AS REQUIRED), TRENCH AND BEDDING PER STANDARD DETAILS
- 24 INSTALL 36" RCP STORM DRAIN PIPE (WATERTIGHT JOINTS & BENDS & FITTINGS AS REQUIRED), TRENCH AND BEDDING PER STANDARD DETAILS
- 25 CONSTRUCT MODIFIED JUNCTION STRUCTURE PER RCFC & WCD STD. NO. ____
- 26 CONSTRUCT MANHOLE PER SPPWC STD. 321-2
- 27 CONSTRUCT CATCH BASIN PER GRADING PLANS
- 28 INSTALL UNDERGROUND DETENTION SYSTEM, SIZE PER PLAN
- 29 INSTALL MODULAR WETLAND UNIT, SIZE PER PLAN
- 30 CONSTRUCT HEADWALL STRUCTURE PER ____ APRON PER ____
- 31 CONSTRUCT WATER QUALITY SUMP PUMP STRUCTURE & PUMPS ON RAIL SYSTEM
- 32 CONSTRUCT DUPLEX SD LIFT STATION JENSEN 472 (OR EQUAL) WITH HOMA PUMPS 0.5 CFS WITH 15' HEADLOSS
- 33 CONSTRUCT 8" PVC SDRM WITH RESTRAINED JOINTS
- 34 INSTALL STORM DRAIN CONNECTION FLAP GATE
- 35 CONSTRUCT MANHOLE WITH STEEL WEIR PLATE
- 36 CONSTRUCT CONCRETE WET VAULT SIZE PER PLAN
- 37 CONSTRUCT 30" RCP STORM DRAIN CULVERT



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DETAIL '1'
SCALE: 1" = 20'

NOTE:
STORM DRAIN VIDEO SHALL BE SUBMITTED TO THE M.J.P.A PUBLIC WORKS ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PAVEMENT CAPPING OR CONCRETING.

NOTE:
ON-SITE STORM DRAINAGE FACILITIES SHALL BE PRIVATELY MAINTAINED.

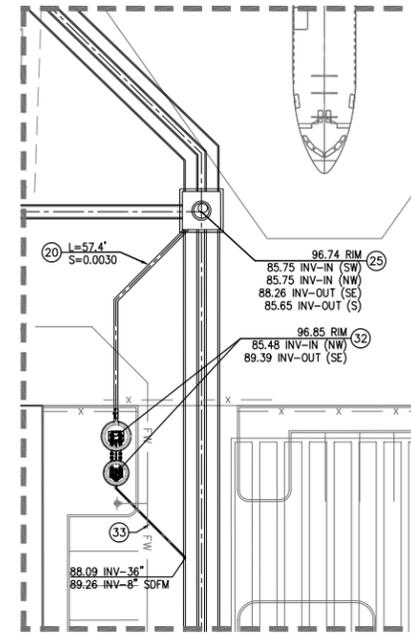
NOTE:
THE ONSITE WQMP SYSTEM/EQUIPMENT SHALL BE INSPECTED AND CERTIFIED BY M.J.P.A

NOTE:
CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, BEDDING, BACKFILL AND ALL CONSTRUCTION COSTS RELATED TO INSTALLATION OF PIPE TO MEET MANUFACTURER'S INSTALLATION RECOMMENDATIONS AND GEOTECHNICAL RECOMMENDATIONS BASED UPON CONDITIONS SPECIFIC TO THIS PROJECT AND CONTRACTOR PRODUCT SUBMITTAL APPROVED BY CIVIL ENGINEER.

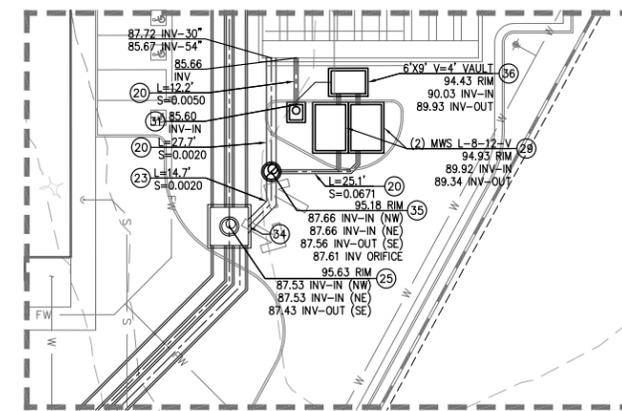
FOR THE UNDERGROUND STORAGE SYSTEM CONTRACTOR CAN PROPOSE ALTERNATE PIPE MATERIALS/LAYOUT PENDING APPROVAL BY OWNER, ENGINEER AND M.J.P.A. CONTRACTOR IS RESPONSIBLE FOR FUNDING ANY POTENTIAL AGENCY FEES FOR REVIEW/APPROVAL OF AN ALTERNATE SYSTEM AND FOR COST OF ENGINEER DESIGN REVIEW/PLAN MODIFICATION. PLEASE NOTE THAT ALTERNATIVE PRODUCTS/LAYOUTS WILL NEED TO MEET OR EXCEED STORAGE CAPACITY; STRUCTURAL CAPACITY AND HYDRAULIC PERFORMANCE AS DETERMINED BY ENGINEER TO BE DEEMED ACCEPTABLE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH PROPOSED DESIGN ALTERNATIVE (FOR EXAMPLE REMOVAL OF BEDROCK DURING EXCAVATION OF ALTERNATE LAYOUT). CONTRACTOR IS ALSO RESPONSIBLE FOR TIME REQUIRED FOR REVIEW AND PROCESSING OF ALTERNATE DESIGN.

CONSTRUCTION NOTES:

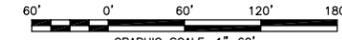
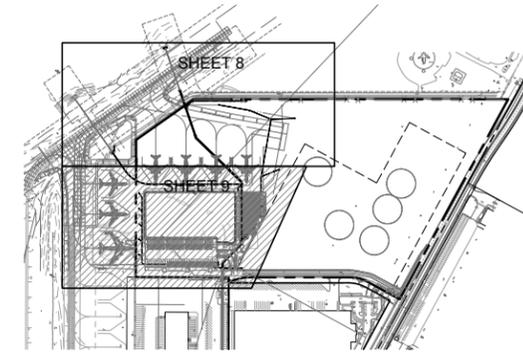
- 20 INSTALL 12" HDPE STORM DRAIN PIPE (WATERTIGHT JOINTS WITH BENDS & FITTINGS AS REQUIRED), TRENCH AND BEDDING PER STANDARD DETAILS
- 21 INSTALL 18" HDPE STORM DRAIN PIPE (WATERTIGHT JOINTS WITH BENDS & FITTINGS AS REQUIRED), TRENCH AND BEDDING PER STANDARD DETAILS
- 22 INSTALL 24" HDPE STORM DRAIN PIPE (WATERTIGHT JOINTS WITH BENDS & FITTINGS AS REQUIRED), TRENCH AND BEDDING PER STANDARD DETAILS
- 23 INSTALL 30" HDPE STORM DRAIN PIPE (WATERTIGHT JOINTS WITH BENDS & FITTINGS AS REQUIRED), TRENCH AND BEDDING PER STANDARD DETAILS
- 24 INSTALL 36" RCP STORM DRAIN PIPE (WATERTIGHT JOINTS & BENDS & FITTINGS AS REQUIRED), TRENCH AND BEDDING PER STANDARD DETAILS
- 25 CONSTRUCT MODIFIED JUNCTION STRUCTURE PER RCF&C & WCD STD. NO. ____
- 26 CONSTRUCT MANHOLE PER SPPWC STD. 321-2
- 27 CONSTRUCT CATCH BASIN PER GRADING PLANS
- 28 INSTALL UNDERGROUND DETENTION SYSTEM, SIZE PER PLAN
- 29 INSTALL MODULAR WETLAND UNIT, SIZE PER PLAN
- 30 CONSTRUCT HEADWALL STRUCTURE PER ____ APRON PER ____
- 31 CONSTRUCT WATER QUALITY SUMP PUMP STRUCTURE & PUMPS ON RAIL SYSTEM
- 32 CONSTRUCT DUPLEX SD LIFT STATION JENSEN 472 (OR EQUAL) WITH HOMA PUMPS 0.5 CFS WITH 15' HEADLOSS
- 33 CONSTRUCT 8" PVC SDFM WITH RESTRAINED JOINTS
- 34 INSTALL STORM DRAIN CONNECTION FLAP GATE
- 35 CONSTRUCT MANHOLE WITH STEEL WEIR PLATE
- 36 CONSTRUCT CONCRETE WET VAULT SIZE PER PLAN
- 37 CONSTRUCT 30" RCP STORM DRAIN CULVERT



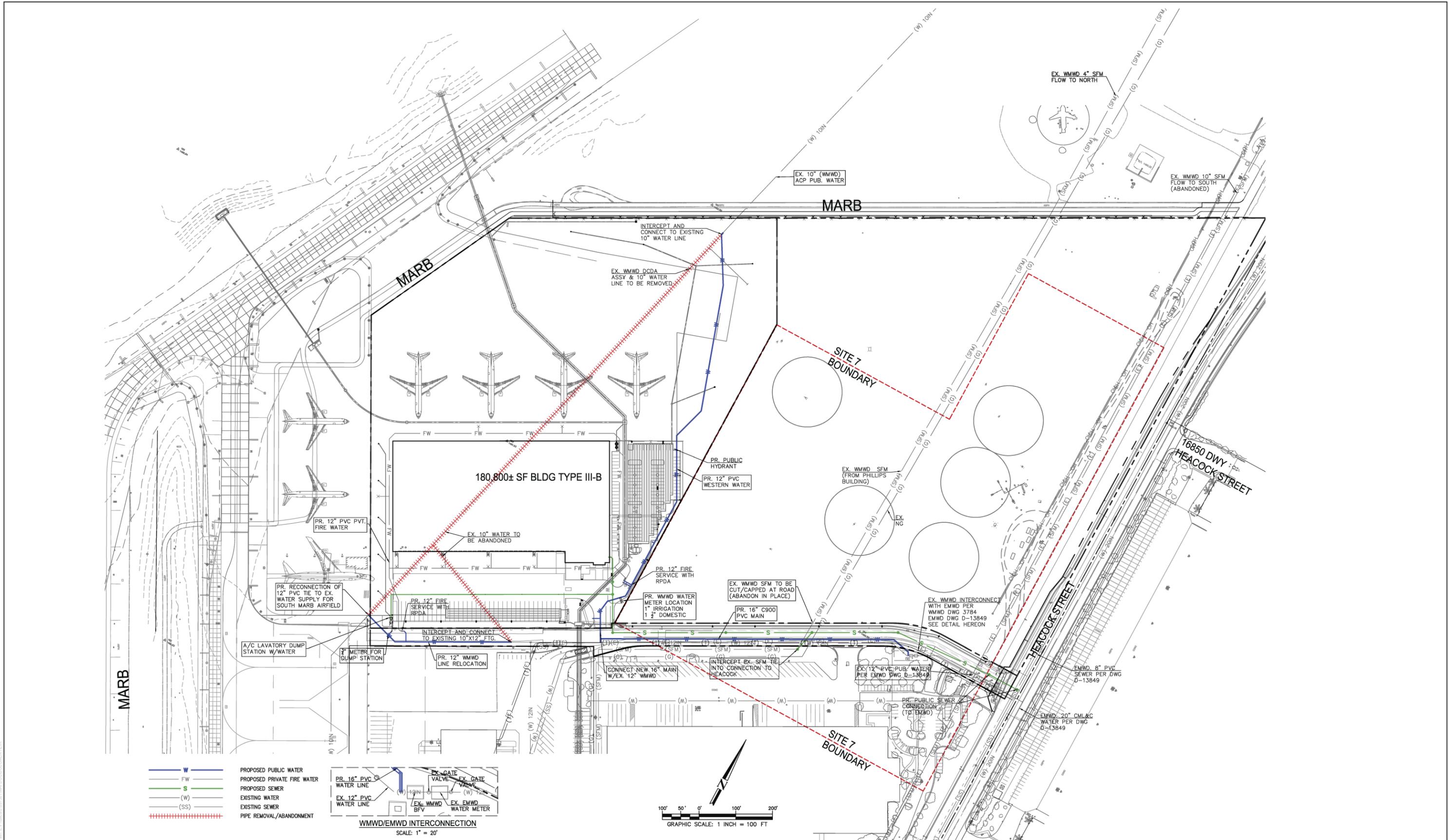
DETAIL '3'
SCALE: 1" = 20'



DETAIL '2'
SCALE: 1" = 20'



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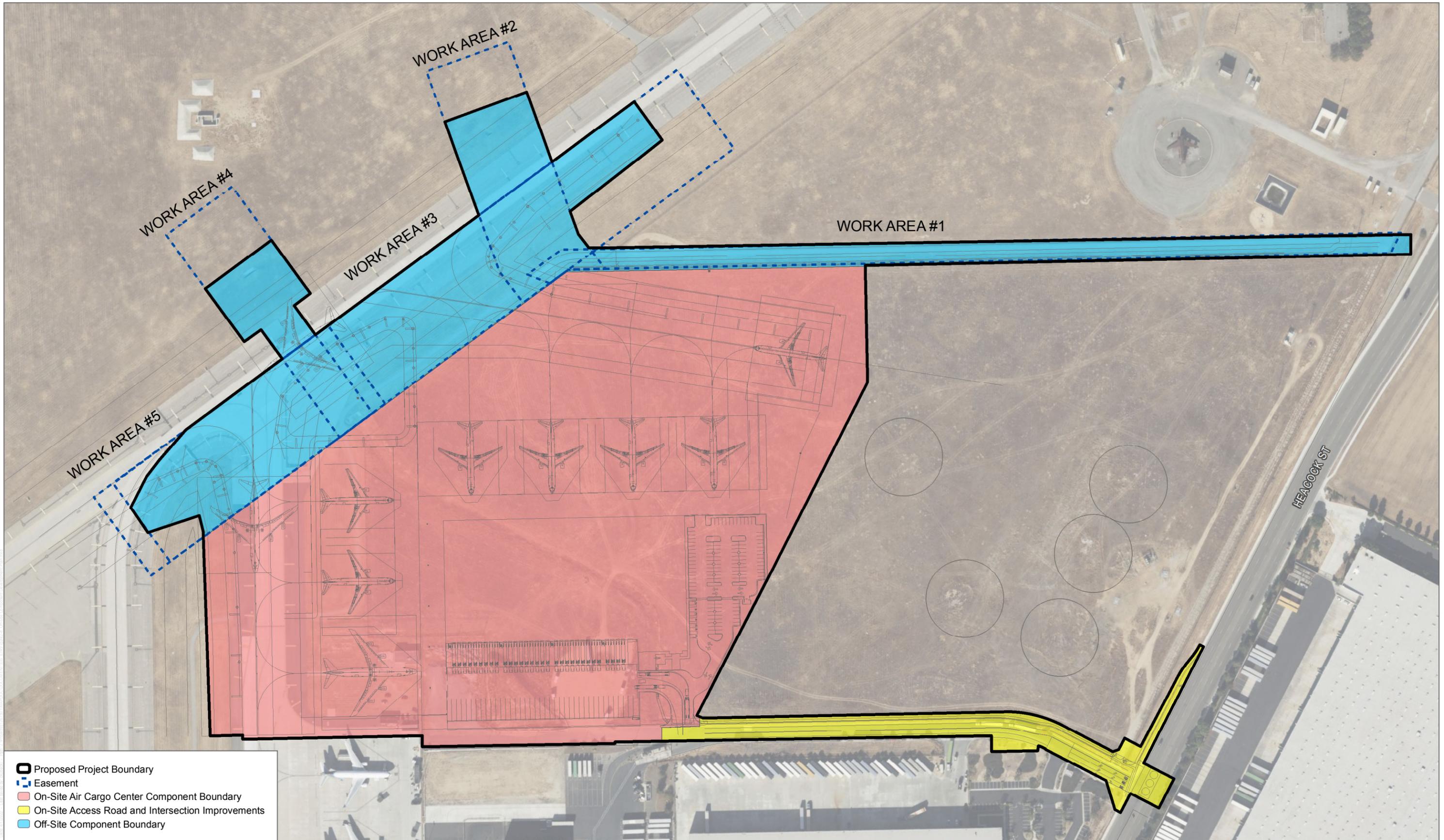
SOURCE: DRC Engineering 2024



FIGURE 2-8
Water and Sewer Infrastructure Plan
 Meridian D-1 Gateway Aviation Center Project

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SOURCE: Bing Maps 2021; DRC Engineering 2022

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3 Environmental Analysis

The purpose of this Environmental Impact Report (EIR) is to evaluate the potential environmental effects of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project). The March Joint Powers Authority (JPA) circulated a Notice of Preparation (NOP) beginning on March 31, 2021, with the public review period ending on April 29, 2021. The NOP was transmitted to the State Clearinghouse, responsible agencies, other affected agencies, and property owners immediately adjacent to and within a 1,000-foot radius of the project site to solicit issues or potential environmental effects related to the Proposed Project. The NOP, Initial Study, distribution list, and comment letters are provided in Appendices A-1 through A-3 of this EIR.

Sections 3.1 through 3.14 of this EIR contain the analysis of the potential environmental impacts associated with implementation of the Proposed Project and focus on the following issues:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

During preparation of the Initial Study/NOP for this EIR, other potential environmental impact areas, such as agriculture and forestry resources, mineral resources, population and housing, public services, recreation, and wildfire, were found not to be significant based on the results of the Initial Study. A summary of the Initial Study analysis for each of these issues is included in Section 4.2, Effects Found Not to Be Significant, of this EIR.

Technical Studies

Technical studies were prepared to analyze air quality/health risk assessments, biological resources, cultural and historical resources, energy resources, geology and soils/paleontological resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, and transportation impacts, and were used in the preparation of this EIR. These documents are identified in the discussions for the individual environmental issues and included as technical appendices to the EIR. The EIR is available on the March JPA website at www.marchjpa.com.

Analysis Format

The EIR assesses how the Proposed Project would impact each of the issue areas. Each environmental issue addressed in this EIR is presented in terms of the following subsections:

- **Existing Conditions:** Provides information describing the existing setting on or surrounding the project site that may be subject to change as a result of implementation of the Proposed Project. This discussion describes the conditions that existed when the NOP was sent to responsible agencies and the State Clearinghouse.
- **Relevant Plans, Policies, and Ordinances:** Provides a discussion of federal, state, regional, and local plans, policies, and ordinances applicable to the Proposed Project.

- **Project Design Features:** Where applicable, features of the Proposed Project that are incorporated into the project design and that would reduce or avoid potential environmental impacts are identified. If the Project is approved, these Project Design Features (PDFs) will be included as conditions of approval. This subsection is not included for issue areas with no relevant PDFs.
- **Thresholds of Significance:** Provides criteria for determining the significance of Proposed Project impacts for each environmental topic.
- **Impact Analysis:** Provides a discussion of the characteristics of the Proposed Project that may have an effect on the environment, analyzes the nature and extent to which the Proposed Project is expected to change the existing environment, and indicates whether the Proposed Project impacts meet or exceed the levels of significance thresholds.
- **Mitigation Measures:** Identifies measures to reduce potentially significant adverse impacts to the extent feasible.
- **Level of Significance after Mitigation:** Provides a summary of significant impacts that cannot be feasibly mitigated or avoided, significant impacts that would be mitigated to a less-than-significant level, impacts that would be less than significant, and no impact.
- **Cumulative Effects:** Provides a discussion of cumulative environmental effects of the Proposed Project in combination with related projects, including the Proposed Project's contribution to the cumulative environmental effects.
- **References Cited:** Provides a list of references and documents cited within the section.

Cumulative Impacts Analysis Methodology

Introduction

The California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et seq.) requires that an EIR examine the cumulative impacts associated with a project, in addition to project-specific impacts. The discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the proposed project alone (14 CCR 15130[b]).

As stated in the CEQA Guidelines, an EIR “shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable” (14 CCR 15130[a]). “Cumulatively considerable” means that “the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects” (14 CCR 15064[h][1]). Section 15355(b) of the CEQA Guidelines states that cumulative impacts occur from “the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation, including providing improvements and/or contributing funds through fee-payment programs. The EIR must examine “reasonable, feasible options for mitigating or avoiding the project’s contribution to any significant cumulative effects” (14 CCR 15130[a][3] and 14 CCR 15130[b][5]).

Cumulative Analysis Methodology

Section 15130(b)(1)(A) of the CEQA Guidelines allows for the preparation of a list of past, present, and reasonably anticipated future projects as a viable method of determining cumulative impacts. This EIR discussion uses the following approach: an initial list and description of all related projects is presented, followed by a discussion of the effects that the Proposed Project may have on each environmental category of concern. Consistent with CEQA, this discussion is guided by the standards of practicality and reasonableness.

Cumulative Projects

This section provides a list of past, present, and reasonably foreseeable future projects based on the information that was provided in the Air Quality Report (Appendix B-1), Greenhouse Gas Emissions Analysis (Appendix G), Noise Impact Analysis Report (Appendix L-1), March ARB [Air Reserve Base] Aircraft Operation Noise Contour Analysis (Appendix L-2), and the Traffic Analysis (Appendix M-1) prepared for the Proposed Project. The cumulative project list (Table 3-1) was developed for the purposes of this analysis through consultation with planning and engineering staff from March JPA, the City of Riverside, the City of Moreno Valley, the City of Perris, and the County of Riverside to include key projects in their respective jurisdictions. Because the Proposed Project would introduce additional flights taking off from and landing at March ARB/Inland Port Airport, the cumulative analysis focuses on two environments: the built (or on-ground) environment and the aviation/aircraft flight environment. This allows for a cumulative analysis to be completed that takes into account both on-ground cumulative impacts pertaining to environmental impacts that may occur to the physical built environment, and potential cumulative impacts associated with aviation uses. Cumulative projects that fall within the on-ground environment are assessed for cumulative impacts within each environmental issue area identified throughout the environmental analysis section of this EIR. For purposes of this analysis, the aviation/aircraft flight environment cumulative impacts are assessed in Section 3.2, Air Quality; Section 3.5, Energy; Section 3.7, Greenhouse Gas Emissions; and Section 3.11, Noise. The cumulative aviation/aircraft flight impact assessment is limited to these sections because aviation uses are anticipated to generate additional air quality and greenhouse gas emissions, use additional energy fueling resources, and generate additional noise through the use of aircraft. The aircraft characteristics used for the analysis conducted in Appendix B-1, Appendix G, and Appendices L-1 and L-2 assumed annual commercial flight operations of 10,608 air cargo operations (5,304 arrivals/5,304 departures) by the Proposed Project and were therefore utilized for the aviation/aircraft flight environment cumulative analysis.

Table 3-1 presents the cumulative projects surrounding the project site, capturing the March JPA planning area and surrounding areas. The projects listed in Table 3-1 serve as the foundation on which the cumulative analysis approach was based. Figure 3-1, Cumulative Project Map, shows geographically where the projects listed in Table 3-1 are located. As shown in Figure 3-1, the nearest project listed in Table 3-1 is the Moreno Valley Logistics Center (Map ID MV4), located directly east of the project site. However, the geographic extent for cumulative analysis varies depending on each environmental issue area. For example, air quality impacts need to consider the entire South Coast Air Basin, whereas noise impacts would be limited to the area more immediately surrounding the project site. The geographic extent used in conducting the cumulative analysis for each environmental issue area of this EIR is provided within each individual cumulative impact analysis subsection within Sections 3.1 through 3.14 of this EIR.

Table 3-1. Cumulative Projects

ID	Project Name	Land Use	Quantity ^a	Unit
March Joint Powers Authority				
MJPA1	Meridian Business Park (West Campus)	Industrial Park	2,279	ksf
MJPA2	K4 Parcel	Warehouse	718	ksf
MJPA3	Economic Business Center	Warehouse	125	ksf
MJPA4	Freeway Business Center	Warehouse	709	ksf
MJPA5	Veteran's Industrial Park/VIP 215	Warehouse	1,867	ksf
MJPA6	Veteran's Plaza Phase I and Phase II	Commercial	202,000	ksf
MJPA7	MS Van Buren I	Warehouse	176	ksf
MJPA8	MS Van Buren II	Warehouse	162	ksf
MJPA9	MS Prime Six	General Office	75	ksf
MJPA10	Meridian Distribution Center IV	Warehouse	90	ksf
MJPA11	Meridian Distribution Center III	Warehouse	262	ksf
MJPA12	Eagle Business Park	Business Park	390	ksf
MJPA13	Meridian South Campus	Office	388	ksf
		Commercial Retail	298	ksf
		Business Park	1,764	ksf
		Warehousing	774	ksf
		High-Cube Cold Storage	700	ksf
		High-Cube Transload	800	ksf
		LGB6 (Building A)	1,000	ksf
		Parcel Delivery	1,000	ksf
		Dog Park	6	Acres
MJPA14	Meridian U1 L2 Industrial Warehouse	Warehouse	49	ksf
MJPA15	March Veterans Village - Building 1	Transitional Housing	16	DU
MJPA16	West Campus Upper Plateau	High-Cube Fulfillment	2,563	ksf
		High-Cube Cold Storage	500	ksf
		Business Park - Office	529	ksf
		Business Park - Warehouse	1,234	ksf
		Commercial	161	ksf
		Active Park	42	Acres
		Public Park	18	Acres
City of Riverside				
R1	P17-0419/20/21	Fast Food w/Drive Through	2	ksf
R2	P16-0578	Warehouse	82	ksf
R3	P19-0151/P19-0152/P19-0153	Health and Fitness Club	22	ksf
R4	P13-0665	Single-Family Detached	8	DU
R5	P15-1035/P16-0556/P16-0567	Warehouse	176	ksf
R6	P14-0841 to P14-0848/ P16-0472/P16-0474	Warehouse	73	ksf
		Commercial Retail	15	ksf

Table 3-1. Cumulative Projects

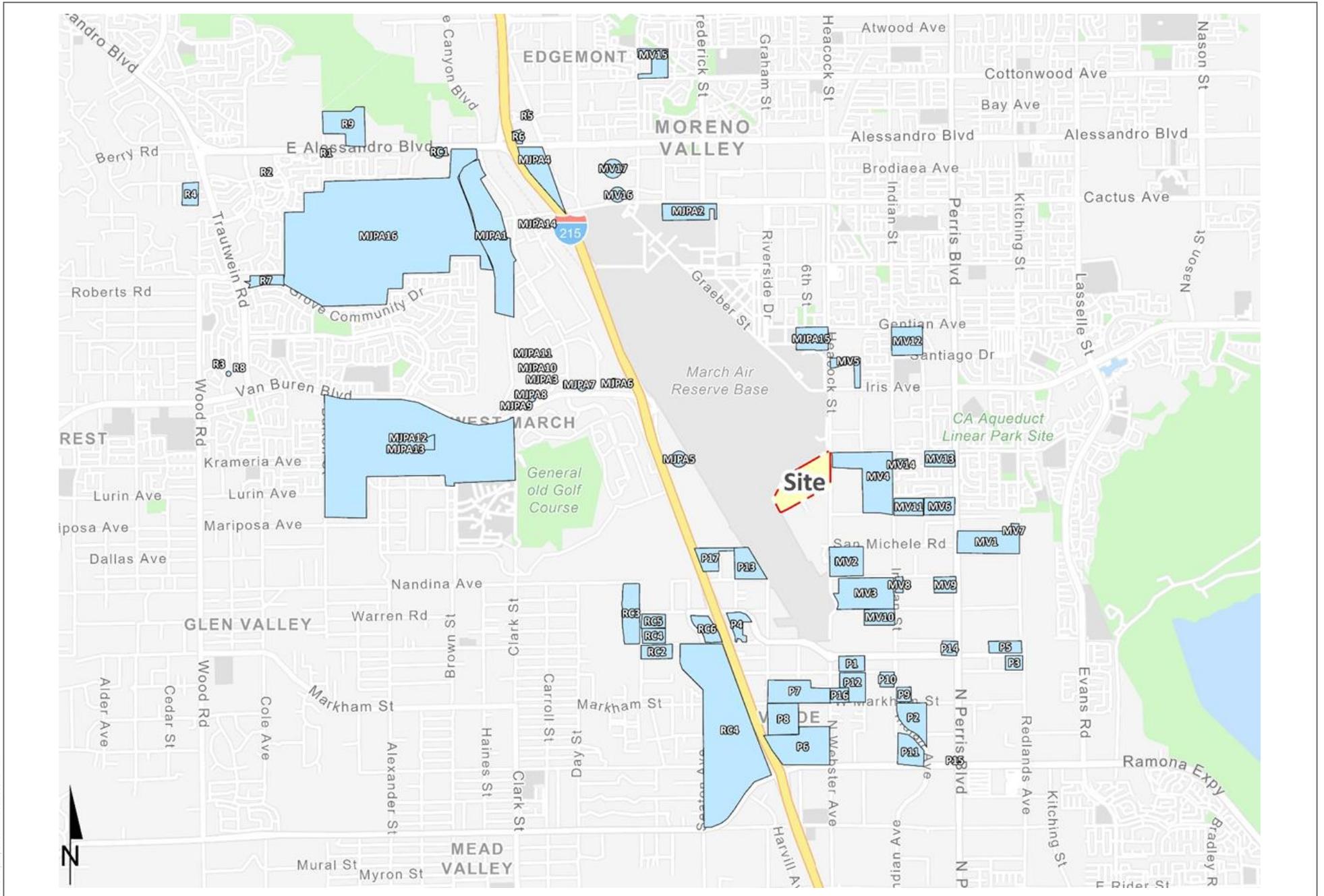
ID	Project Name	Land Use	Quantity ^a	Unit
R7	P14-0472/P14-0473/P15-0321/ P15-0322	Single-Family Detached	85	DU
R8	P19-0022/P19-0024/P19-0026/ P19-0027/P19-0028	Fast Food w/Drive Through	4	ksf
R9	Sycamore Hills Distribution Center	Warehouse	603	ksf
County of Riverside				
RC1	PP 25422	Warehouse	814	ksf
RC2	Knox Business Park	Warehouse	1,259	ksf
RC3	Oleander Business Park	Warehouse	711	ksf
RC4	Majestic Freeway Business Center Specific Plan	General Light Industrial	6,200	ksf
RC5	PPT210130	Warehouse	239	ksf
RC6	PPT190031	High-Cube Warehouse	418	ksf
City of Moreno Valley				
MV1	Kearney	High-Cube Warehouse	1,100	ksf
MV2	IDS	High-Cube Warehouse	701	ksf
MV3	First Industrial	High-Cube Warehouse	1,380	ksf
MV4	Prologis 1	High-Cube Warehouse	1,000	ksf
MV5	Moreno Valley Industrial Park	High-Cube Warehouse	208	ksf
MV6	Tract 31442	Single-Family Detached	63	DU
MV7	Moreno Valley Utility Substation	High-Cube Warehouse	N/D	ksf
MV8	Phelan Development	High-Cube Warehouse	98	ksf
MV9	Nandina Industrial Center	High-Cube Warehouse	336	ksf
MV10	Indian Street Commerce Center	High-Cube Warehouse	434	ksf
MV11	Tract 32716	Single-Family Detached	57	DU
MV12	Tract 36760	Single-Family Detached	221	DU
MV13	PEN18-0042	Single-Family Detached	2	DU
MV14	Tract 33024	Single-Family Detached	8	DU
MV15	Scottish Village	Multifamily	194	DU
MV16	Moreno Valley Cactus Center (PEN16-0131)	Warehouse	37	ksf
		Fast Food w/Drive Through	8	ksf
		Gas Station w/Car Wash	28	VFP
MV17	PA 08-0047-0052 (Komar Cactus Plaza)	Hotel	110	Rooms
		Fast Food w/Drive Through	8	ksf
		Commercial	42	ksf
City of Perris				
P1	Bargemann/DPR 07-09-0018	Warehousing	173	ksf
P2	Duke 2/DPR 16-00008	High-Cube Warehouse	669	ksf
P3	Perris Circle 3	Warehousing	211	ksf

Table 3-1. Cumulative Projects

ID	Project Name	Land Use	Quantity ^a	Unit
P4	Gateway/DPR 16-00003	High-Cube Warehouse	400	ksf
P5	Harley Knox Commerce Park/ DPR 16-004	High-Cube Warehouse	386	ksf
P6	OLC 1/DPR 12-10-0005	High-Cube Warehouse	1,455	ksf
P7	OLC2/DPR 14-01-0015	High-Cube Warehouse	1,037	ksf
P8	Duke at Patterson/DPR 17-00001	High-Cube Warehouse	811	ksf
P9	Markham Industrial/DPR 16-00015	Warehousing	170	ksf
P10	Westcoast Textile/DPR 16-00001	Warehousing	180	ksf
P11	Indian/Ramona Warehouse	High-Cube Warehouse	429	ksf
P12	IPT Perris DC II	High-Cube Warehouse	273	ksf
P13	Western Way/Nandina Warehouse	Cold Storage Warehouse	252	ksf
P14	March Plaza/CUP 16-05165	Commercial Retail	47	ksf
P15	Cali Express Carwash/CUP 16-05258	Carwash	6	ksf
P16	Integra Expansion/MMOD 17-05075	High-Cube Warehouse	273	ksf

Notes: ksf = thousand square feet; DU = dwelling units; N/D = no data; VFP = vehicle fueling positions.

^a Quantities rounded to the nearest whole number.



SOURCE: Urban Crossroads, 2024

FIGURE 3-1
Cumulative Projects

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3.1 Aesthetics

This section describes the existing aesthetic and visual conditions of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, and evaluates potential impacts. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- March Joint Powers Authority (JPA) General Plan (March JPA 1999)
- March JPA Development Code (March JPA 2016)
- Riverside County Airport Land Use Commission March Air Reserve Base (ARB)/Inland Port Airport Land Use Compatibility Plan (Riverside County ALUC 2014)

Other sources consulted are listed in Section 3.1.8, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March JPA. The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March ARB. Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.1.1 Existing Conditions

The approximately 46-acre project site is located west of Heacock Street and southwest of the intersection of Heacock Street and Krameria Avenue, in unincorporated Riverside County, California. The March ARB Fire Department facility is located immediately north of the project site, and industrial warehouse facilities occupied by Hanes/DDI and an air cargo center occupied by KRIV-Amazon are located immediately south of the site. Interstate 215 is located approximately 1 mile west of the project site and the nearest sensitive receptors, single-family residences to the east of Indian Street, are located approximately 0.5 miles to the east of the project site. Note that due to the presence of intervening warehouse development, residents located east of Indian Street are not provided views to the project site. Refer to Figure 1-1, Project Site, in Chapter 1, Introduction, of this EIR.

Light and Glare

The majority of the project site does not contain existing sources of lighting; however, there are four existing light poles surrounding the vacant fire house located in the southwestern corner of the site. In addition, existing facilities adjacent to and in the vicinity of the project site contribute lighting to the nighttime environment. For example, industrial warehouse facilities occupied by Hanes/DDI and an air cargo center occupied by KRIV-Amazon are located to the immediate south of the project site, and the existing Lowe's distribution and warehouse center is located east of the site, across Heacock Street. These facilities include internal and external (i.e., general illumination and security) lighting, as well as parking lot and roadway lighting, which is visible from the project site. In addition to lighting associated with nearby facilities, streetlights are present along the Heacock Street corridor.

March ARB aviation facilities, taxiways, and runways are an additional source of night lighting in the landscape surrounding the area. For example, there are two runways within March ARB, identified as Runway 14/32 and Runway 12/30. Runway 14 and Runway 12 provide a directional landing runway for aircraft approaching from the northwest, while Runway 32 and Runway 30 provide a directional landing runway for aircraft approaching from the southeast. Runway 14/32 (approximately 13,302 feet long) is equipped with high-intensity runway edge lights, threshold lights, runway end lights, and “distance remaining” markers. Runway 14 has a four-element precision approach path indicator (PAPI) to the left of the runway. Runway 32 has a four-element PAPI to the left of the runway and is equipped with a high-intensity approach lighting system with sequenced flashing lights, Category I (March ARB 2017). The PAPI lighting system provides visual guidance for landing aircraft and has a visual range for aircraft of at least 3 miles during the day and up to 20 miles at night (FAA 2019). A high-intensity approach lighting system with sequenced flashing lights typically consists of steadily burning lights, including green threshold lights, red side row-bar lamps, and high-intensity steadily burning white lights, plus additional flashing lights, commonly referred to as “strokes.” The strokes flash in sequence starting with the stroke farthest from the runway and ending with the stroke closest to the runway threshold (FAA 2020). Runway 32 has recessed overt lighting for an Airfield Marking Panel (AMP)—3 (Night) Landing Zone approximately 300 feet from the approach end of Runway 32. Runway 12/30 (3,061 feet long) has no runway lighting installed. Taxiways A and G contain taxiway edge lighting and taxiway guidance signs. Lastly, while it is not located in the immediate vicinity of the project site, a rotating beacon at March ARB is continuously operated at night, regardless of published or unpublished closures and holidays (Riverside County ALUC 2014; March ARB 2017). The rotating beacon is installed at the March ARB Base Operations and Control Tower (approximately 0.85 miles north of the project site).

In regard to existing night lighting, the nearest sensitive receptors (single-family residences to the east of Indian Street) are not generally provided views to the lighting sources described above. The presence of intervening warehouse development (approximately 30- to 40-foot-high structures) and related outdoor site lighting blocks and otherwise obscures taxiway and runway lighting from the view of residences in the immediate area east of Indian Street. Similarly, intervening development, including warehouse buildings (approximately 25- to 30-foot-high structures) and modular/pre-fabricated buildings near the Harley Knox Boulevard/Patterson Avenue intersection, obscures taxiway and runway lighting from the view of scattered single-story residences to the southwest of the project site and south of Harley Knox Boulevard. The nearest residence in this general area (i.e., the single-story structure located at the southwestern corner of the Harley Knox Boulevard/Patterson Avenue intersection) is located approximately 1.25 miles from the project site.

3.1.2 Relevant Plans, Policies, and Ordinances

Federal

14 CFR Part 77: Safe, Efficient Use, and Preservation of the Navigable Airspace

Title 14 of the Code of Federal Regulations (CFR), Part 77, establishes the requirements to provide notice to the Federal Aviation Administration (FAA) of certain proposed construction or the alteration of existing structures; the standards used to determine obstructions to air navigation and navigational and communication facilities; the process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace, air navigation facilities, or equipment; and the process to petition the FAA for discretionary review of determinations, revisions, and extensions of determinations.

14 CFR Part 77 requires the submittal of FAA Form 7460-1 when a project proposes any construction or alteration to an airport operated by a federal agency or the Department of Defense. A project must provide adequate notice to FAA of such construction or alteration.

Notice received by FAA under this subpart is used to evaluate the effect of the proposed construction or alteration on safety in air commerce and the efficient use and preservation of the navigable airspace and of airport traffic capacity at public use airports; determine whether the effect of proposed construction or alteration is a hazard to air navigation; determine appropriate marking and lighting recommendations, using FAA Advisory Circular 70/7460-1, Obstruction Marking and Lighting; determine other appropriate measures to be applied for continued safety of air navigation; and notify the aviation community of the construction or alteration of objects that affect the navigable airspace, including the revision of charts, when necessary.

Federal Aviation Administration Lighting Guidelines

FAA Advisory Circular 70/7460-1: Obstruction Marking and Lighting

This advisory circular describes FAA's standards for marking and lighting structures to promote aviation safety. This Advisory Circular requires a project sponsor proposing any type of construction or alteration of a structure that may affect the National Airspace System as required under the provisions of 14 CFR Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace, to notify the FAA by completing the FAA Form 7460-1, Notice of Proposed Construction or Alteration.

FAA Advisory Circular 150/5345-43: Specification for Obstruction Lighting Equipment

This advisory circular contains the FAA specification for obstruction lighting equipment. This document recommends the guidance and specifications for obstruction lighting equipment within airports. Obstruction lighting that conforms to the specifications and standards therein constitutes lighting systems that satisfy the applicable requirements of 14 CFR Section 139.311.

FAA Advisory Circular 150/5345-53: Airport Lighting Equipment Certification Program

The purpose of the Airport Lighting Equipment Certification Program is to assist airport sponsors in discharging their duty to ensure that airport lighting equipment meets the applicable FAA standards for safety, performance, quality, and standardization. It provides information on how an organization can get FAA acceptance as a third-party certification body (third-party certifier) and how manufacturers may get equipment qualified under the program. It includes a list of the equipment that is certified under the program.

FAA Order JO 7110.65: Air Traffic Control

This FAA order prescribes air traffic control procedures and phraseology for use by personnel providing air traffic control services. The order identifies the necessary lighting to be installed within airports regulated by the FAA, including emergency lighting, runway end identifier lights, visual approach slope indicators, PAPIs, approach lights, sequenced flashing lights, runway edge lights, taxiway lights, obstruction lights, and rotating beacons, among others.

March Air Reserve Base Guidance

March ARB Instruction 13-204

This March ARB instruction publication provides guidance and procedures on airfield operations at March ARB. It applies to individuals at all levels who operate or perform servicing functions on aircraft at March ARB airfield facilities, individuals who operate within and in the vicinity of March ARB designated airspace, and personnel responsible for implementing airfield operations functions. This publication requires all March ARB lighting to be operated in accordance with FAA Order JO 7110.65.

State

No aesthetic or visual impact state regulations are applicable to the Proposed Project.

Local

March Joint Powers Authority General Plan

While the March JPA General Plan contains policies pertinent to visual character, visual quality, and viewsheds, it does not include policies specific to light and glare.

March Joint Powers Authority Lighting Standards

Section 9.08.100 (Lighting) of the March JPA Development Code contains the development regulations pertaining to the construction and operation of outdoor lighting associated with non-residential uses, parking areas, and overhead roof lighting (March JPA 2016). Section 9.08.100 (Lighting) development regulations require all outdoor lighting associated with nonresidential uses to be shielded and directed away from surrounding residential uses. Additionally, such lighting shall not exceed 0.5 foot-candles minimum maintained illumination beyond the property containing the nonresidential use, and shall not blink, flash, oscillate, or be of unusually high intensity or brightness.

Section 9.08.190 (Street Lighting) of the March JPA Development Code contains the development regulations pertaining to the construction and operation of streetlights. Section 9.08.190 (Street Lighting) development regulations require the developer to construct or enter into an agreement to construct a street lighting system of either a utility-owned system or a city-owned system. Additionally, Section 9.08.190 (Street Lighting) requires that the installation of street lighting comply with the provision of Chapter 9.14 of the March JPA Development Code for underground utility installation and be in accordance with the specifications of and plans approved by the utility-owned system and the March JPA executive director (March JPA 2016).

Section 9.10.110 (Light and Glare) of the March JPA Development Code provides development regulations pertaining to light and glare prohibiting any operation, activity, sign, or lighting fixture that creates illumination that exceeds 0.5 foot-candles maintained on any adjacent property, whether the illumination is direct or indirect light from the source, and requiring all lighting to be designed to project downward to avoid creating glare on adjacent properties.

3.1.3 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's impacts related to aesthetics are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, as applicable, the March JPA CEQA Guidelines (March JPA 2022). According to these CEQA Guidelines, a project would result in significant impacts if it would:

- a) Have a substantial adverse effect on a scenic vista.
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from [a] publicly accessible vantage point). If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Through the analysis provided in the Initial Study prepared for the Proposed Project (see Appendix A-2 of this EIR), it was determined that the Proposed Project would not have a substantial adverse effect on a scenic vista, substantially degrade scenic resources within a state scenic highway or in a non-urbanized area, or substantially degrade the existing visual character or quality of public views of the site and its surroundings (the project site is not located within an urbanized area [SCAG 2017]). Specifically, impacts to scenic vistas were determined to be less than significant and no impacts to scenic resources within a state scenic highway would occur as a result of implementation of the Proposed Project. Lastly, impacts to existing visual character or quality of public views of the site were determined to be less than significant. Accordingly, these issues are not further analyzed in this EIR. For details regarding these thresholds, please refer to Section 4.2, Effects Found Not to Be Significant, and the Initial Study (included as Appendix A-2 to this EIR).

For the purposes of the analysis in this EIR, a significant impact would occur if the Proposed Project would:

- AES-1** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.4 Impacts Analysis

Impacts to existing daytime and nighttime views are determined through a comparison of existing sources of light and glare operating in the area and proposed sources to be installed in the project area (and any operation controls such as timers, fixture hoods/shields, and/or shutoff times), and through consistency with local and regional requirements. While existing sources of lighting and glare are described qualitatively and based on field observations, approximate illumination levels at the project boundary generated by new lighting sources to be installed on site are informed through a review of the project lighting plan and project-specific site photometrics plan. The site photometrics plan depicts calculated light levels generated from installed sources on the project site at the approximate project boundary. While FAA does not have established light trespass standards, the March JPA lighting standards (specifically, Section 9.10.110 [Light and Glare]) prohibit any operation, activity, sign, or lighting fixture that creates illumination that exceeds 0.5 foot-candles maintained on any adjacent property, whether the illumination is direct or indirect light from the source. Regarding glare, the March JPA lighting standards require all lighting to be designed to project downward to avoid creating glare on adjacent properties. Therefore, the evaluation

of glare focuses on potential for proposed lighting sources to generate upward or side lighting that could potentially result in glare on adjacent properties.

Threshold AES-1: Would the project 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 Proposed Project would contribute additional lighting to the area through the construction and operation of a cargo building on the project site and through additional cargo plane trips that could operate after sundown. The Proposed Project includes development of an Air Cargo Center Component, consisting of an approximately 180,800-square-foot cargo building with 9 grade-level loading doors and 31 truck dock positions. The cargo building would be constructed to a maximum height of 45 feet. In addition, the Proposed Project would require the reconfiguration of the March ARB Taxiway A to Taxilane J transition to allow aircraft to access the proposed cargo building. The reconstruction and realignment of the March ARB Taxiway A/Taxiway G and Taxiway A/Taxiway C intersections would also be required. This would result in a widened entryway for aircraft to turn from Taxiway A to Taxiway C as well as from Taxiway A to Taxiway G, to accommodate aircraft access to the aircraft parking stations along the western boundary of the cargo building. In addition to taxiway reconstruction that is likely to result in the installation of new/additional ground-based lighting sources to ensure adequate illumination for taxiway aircraft, the installation of a traffic signal at the existing access roadway along the southbound side of Heacock Street would entail the operation of a new lighting source in the project area.

Construction Lighting and Glare Impacts

Construction of the Proposed Project would occur over an approximately 10-month period. Construction phases would include site preparation, including demolition and grading; building construction; paving; and architectural coating. Heavy equipment to be used on site during construction would include flat bed trucks, dozers, scrapers, graders, track hoes, dump trucks, forklifts, cranes, cement trucks, pavers, rollers, water trucks, rolling container trucks, and bobcats (see Table 2-3, Construction Equipment Assumptions, for full list). The March JPA Development Code Section 9.10.030 states that noise-generating construction activities may only occur between 7:00 a.m. and 7:00 p.m. (March JPA 2016). As such, there is a potential for construction to occur in the winter months after sunset. Further, as detailed in Section 3.11, Noise, nighttime concrete pours may occur during construction of the Proposed Project. The use of mobile lighting sources to help facilitate nighttime construction could also impact the existing quality of nighttime views available to sensitive ground-based viewers in the surrounding area, including residential land uses. However, because the surrounding area is developed with similar cargo and warehouse building uses that include nighttime operations, and other potentially reflective equipment/vehicles are commonplace in the surrounding visual environment, and because temporary lighting sources would be focused on the area of active construction (as opposed to skyward), construction activities would not generate a substantial amount of new lighting or glare that would significantly interfere existing nighttime view quality provided to sensitive ground-based viewers. Given the typical construction workday of 8 hours, beginning at 7:00 a.m., occurrences of post-sunset work during the 10-month construction time frame are anticipated to be infrequent.

During construction, potential sources of light and glare on the project site may be a concern due to the site's proximity to March ARB runways. Depending on the severity of light and glare sources, interference with air navigation visibility could occur. The project applicant is required to submit FAA Form 7460-1 – Notice of Proposed Construction or Alteration, due to the proposed alterations to Taxiway A and Taxiway G within March ARB. The applicant will be required to submit Form 7460-1 to the FAA for review and approval.

With submittal of this form, and completion of a review of the proposed construction and alteration by the FAA (and identification of needed temporary lighting measures), in conjunction with the infrequent and short-term nature of post-sunset construction, the Proposed Project would not create a new source of substantial light or glare that would adversely affect air navigation.

As such, potential impacts to daytime or nighttime views in the area, including to departing or approaching aircraft, associated with construction lighting or glare would be **less than significant**.

Operational Lighting and Glare Impacts

The Project's lighting/luminaire schedule and layout of new luminaires on the project site is depicted on Figure 3.1-1a, Preliminary Photometric Plan – Proposed Facility, and Figure 3.1-1b, Preliminary Photometric Plan – Entry Drive.¹ In addition to interior lighting, the Proposed Project would include exterior-wall-mounted lighting on the building façade and overhead pole-mounted lighting in the parking lots (including the proposed trailer storage area along the southern boundary of the project site) and along interior access roads. As depicted on Figure 3.1-1a, the maximum height of light poles proposed on the project site in parking lots and trailer storage area would be 25 feet above adjacent ground surface. Lighting associated with the Proposed Project would be of a similar nature and distribution as the lighting sources currently installed on warehouse and distribution facility properties in the surrounding area. In addition, the development plans for the Proposed Project specify that outdoor lighting on the project site would contain full-cutoff fixtures and operate at maximum of 2,700 kelvin and 750 watts. The proposed use of full-cutoff lighting fixtures and the downward direction of all lighting sources would minimize the potential for outdoor lighting sources to produce glare that would be experienced by off-site viewers. Further, the preliminary photometrics/light trespass plans (see Figures 3.1-1a and 3.1-1b) detail that lighting levels within the project site would be sufficient to support Proposed Project operations and would comply with applicable lighting provisions of the March JPA Development Code. Specifically, March JPA Development Code Section 9.08.100 (Lighting) requires that all outdoor lights for non-residential uses not exceed 0.5 foot-candles at the property line and that they not blink, flash, or oscillate or be of unusually high intensity or brightness (March JPA 2016). During operations, the output of new exterior-wall-mounted lighting sources and pole-mounted lighting sources in car and truck parking/storage areas would not exceed 0.5 foot-candles at the property line of the project site. Further, new lighting sources installed on the project site would not blink, flash, or oscillate and the intensity of individual light fixtures would be appropriate for general illumination and security purposes. Therefore, the operation of new lighting installed for the Proposed Project would not result in substantial and/or problematic light levels for air navigation and would not adversely affect the existing quality of nighttime views available to the public. Impacts would be **less than significant**.

With regard to glare, the proposed cargo building would feature grey-toned painted stucco-clad exterior walls and limited windows, which would be located at the main building entrance and along the building's east elevation (near the main entrance). Exterior finishes are presented and included on Figure 2-6, Cargo Building Elevations. Except for windows, exterior building materials would be non-reflective and would not produce glare. The glare-producing potential of the limited windows included in the building exteriors would be minimized by restricting the maximum allowable reflectance of window glazing to 25% (see Figure 2-6). Additionally, the east elevation of the cargo building would be oriented toward Heacock Street and an existing Lowe's distribution warehouse and would not be within the viewshed of residential land uses.

¹ A luminaire is a complete lighting unit, including bulb (if applicable).

Ground-level windows would also not generally be visible to air traffic on March ARB runway approaches from the north and south, or within taxiways to the west of the project site. The Proposed Project does not include solar panels due to the project site's proximity to the March ARB runways. Therefore, potential glare impacts resulting from operation of the Proposed Project would be **less than significant**.

Therefore, based on the analysis presented above, operational light and glare impacts would be **less than significant**.

March ARB Taxiway Lighting Impacts

Because the Proposed Project proposes to alter existing Taxiways A and G within March ARB, the project applicant would be required to submit FAA Form 7460-1, Notice of Proposed Construction or Alteration. If FAA determines that additional lights would be needed to support future air navigation, new lighting would be consistent with existing runway and taxiway lighting in the immediate area in terms of number and intensity. New lighting installed within Taxiways A, C, and G would generally be similar to existing March ARB lighting surrounding the project site, but the Proposed Project would result in an increase in nighttime lighting in the area associated with aircraft operations and runway lighting. However, as described below, the Proposed Project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

The Proposed Project is anticipated to average 17 flights (17 inbound/landing and 17 outbound/take-off operations) per day during typical operations, with up to 22 flights (22 inbound/landing and 22 outbound/take-off operations) potentially occurring over a 4-week peak period during the holiday season. Flights would occur 6 days a week, with inbound flights generally occurring in the early morning hours and outbound flights occurring in the late evening and nighttime hours. Approximately 5% of project-generated aircraft operations are anticipated to occur during the nighttime period, typically between 10:00 p.m. and 11:00 p.m. Flights occurring during daylight hours would not contribute to any nighttime lighting issues because use of lighting to aid in navigation would not be required. Despite the increased number of flights (and the anticipated arrival and departure schedule of flights) and the overall increase in lighting sources associated with the Proposed Project compared to existing conditions, aircraft operations are an established use in the project area and transient aircraft lighting and runway lighting would be neither a new nor a substantial source of lighting, given the prevalence of aircraft operations in the surrounding area. Further, new runway lighting (which would be regulated by FAA in terms of location, type, and height) would likely be low intensity, shielded, and directional and, as previously stated, the nearest residential uses to the project site are visually buffered by existing warehouse development and would not experience new light and glare impacts from runway lighting. Similarly, increased truck traffic on project area roadways associated with ground-based distribution of incoming air freight cargo would not result in excessive lighting that would adversely affect the existing quality of day- or nighttime views in the surrounding area. Proposed Project-related traffic would utilize roadways that currently experience truck traffic associated with existing distribution warehouse uses in the area, and the potential increase in nighttime truck traffic (and associated transient lighting) resulting from project operations would not adversely affect views. Lastly, the installation of a new traffic signal at the existing access roadway would not result in substantial light levels that would adversely affect the existing quality of nighttime views available to sensitive viewers in the area (i.e., residences). As previously discussed, intervening warehouse development would block the traffic signal from view for residences to the east and southwest, and the presence of outdoor site lighting associated with existing warehouses in the areas to the northeast, east, southeast, and south of the project site have altered the nighttime visual environment and include lighting of

greater intensity than a standard traffic signal. Thus, the installation of a new traffic signal would not produce substantial lighting or glare that would adversely affect nighttime views in the area.

Based on the analysis presented above, proposed taxiway reconfiguration, project-related aircraft operations and distribution truck traffic, and the installation of a new traffic signal would not result in adverse effects from substantial light or glare on day- or nighttime views in the area. Impacts would be **less than significant**.

3.1.5 Mitigation Measures

The Proposed Project would have no significant impacts; therefore, no mitigation is required.

3.1.6 Level of Significance after Mitigation

The Proposed Project would result in a less-than-significant impact to aesthetics. No mitigation is required.

3.1.7 Cumulative Effects

The geographic extent for the light and glare cumulative impact analysis is limited to properties immediately surrounding the project site, which includes properties within the March JPA Planning Area located to the south of the project site, March ARB, and properties within the City of Moreno Valley located directly east of the project site along Heacock Street. The cumulative study area for lighting and glare impacts includes the areas in the immediate vicinity of the project site and off-site roadways that could experience light spillover and glare effects. As identified in Table 3-1, Cumulative Projects (refer to Chapter 3, Environmental Analysis), there is only one cumulative project within the cumulative study area for light and glare impacts, identified as MV4 on Figure 3-1, Cumulative Projects.

Implementation of the Proposed Project would introduce new sources of lighting in an area of March Inland Port Airport that does not contain existing lighting. However, as discussed throughout this section of the EIR, there is existing lighting in the surrounding area, consisting of streetlights on Heacock Street, interior and exterior lighting from surrounding warehouse and distribution facilities, and lighting associated with the operation of March ARB. Structures in the surrounding area are constructed with low-reflective building materials. Lighting associated with the Proposed Project would be of a similar nature to the nighttime illumination currently generated by surrounding warehouse and distribution facilities and the existing illumination associated with vehicle and aircraft traffic. All lighting proposed for the Proposed Project would be subject to compliance with the provisions of the March JPA Development Code, which would ensure proper design, installation, and operation of all exterior lighting, thereby reducing the potential for glare effects and light spillover onto adjacent properties. Other projects within the aesthetic cumulative project area would be required to comply with existing regulations pertaining to light and glare, and any project occurring within March ARB would be required to comply with applicable FAA regulations pertaining to light and glare. Therefore, due to the previously existing lighting generated by the warehouse/distribution facility development within the surrounding area and compliance with existing regulations pertaining to light and glare, implementation of the Proposed Project, in addition to the related projects identified in Table 3-1, **would not result in cumulatively considerable impacts** due to light and glare.

3.1.8 References Cited

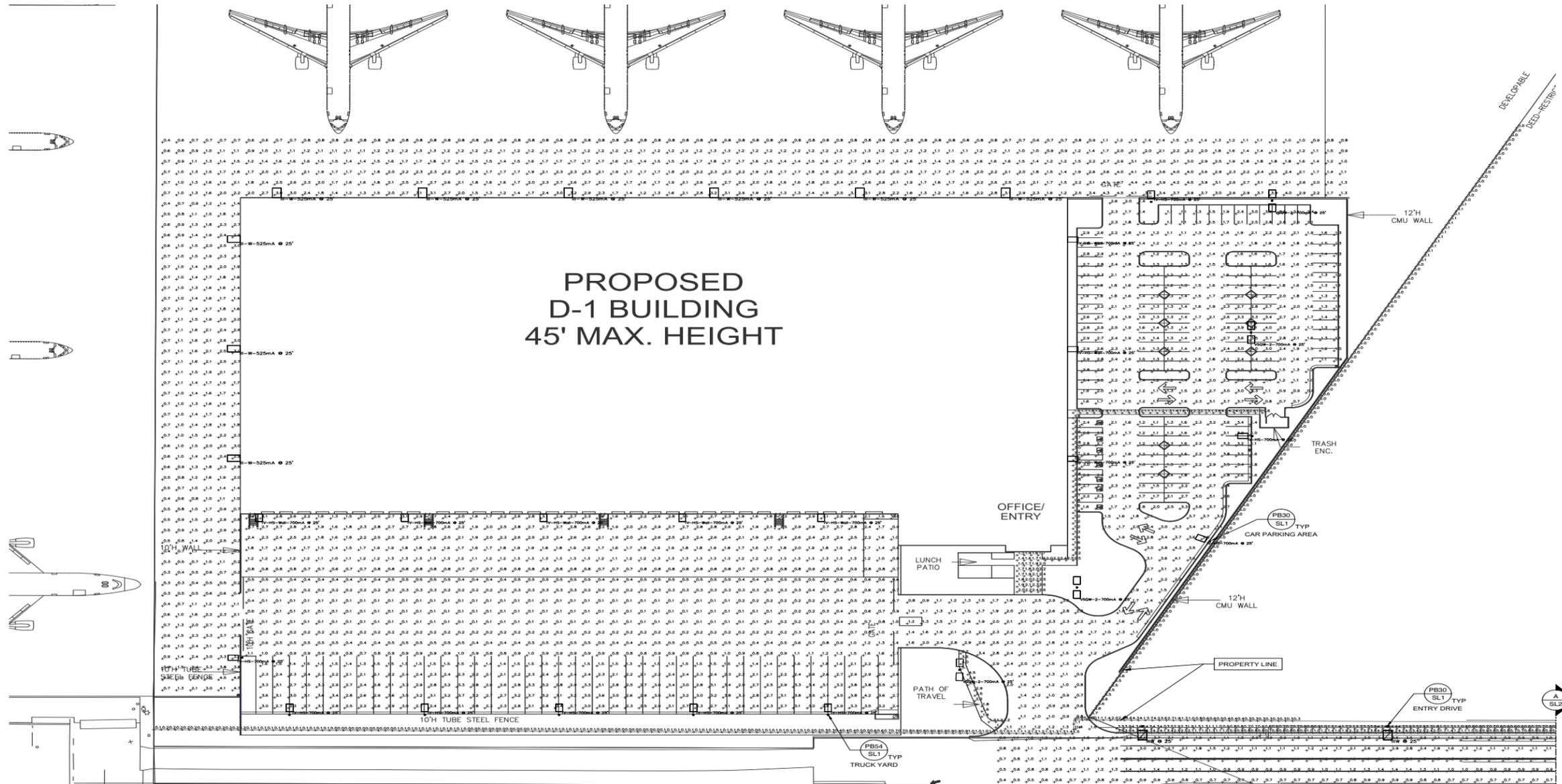
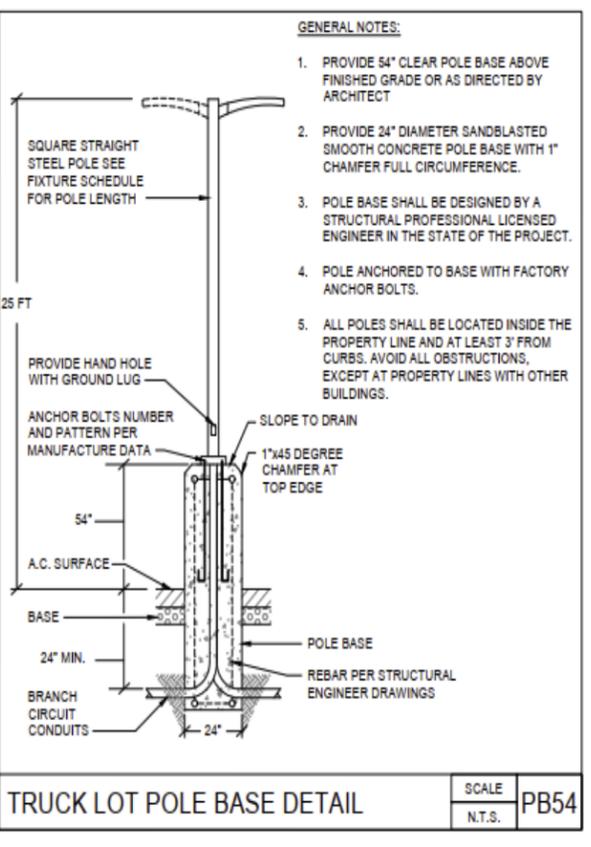
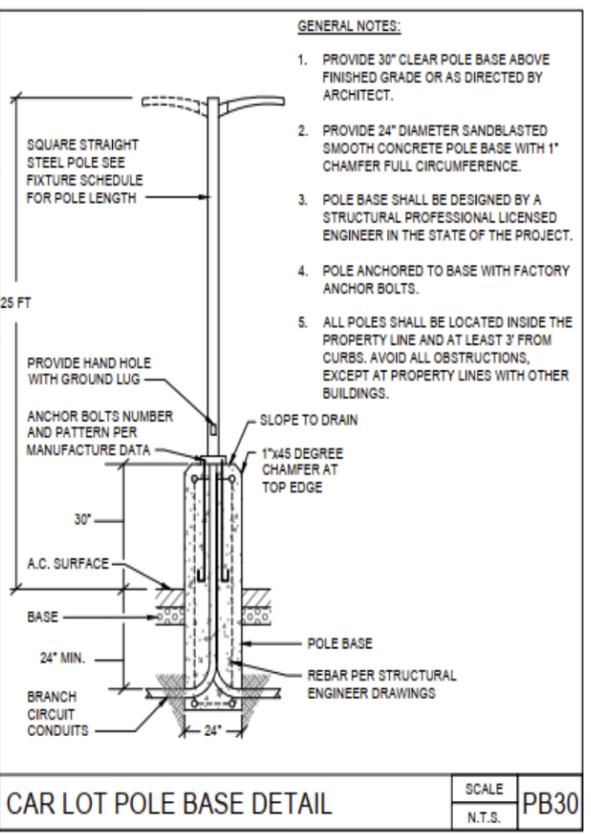
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Statistics					
Description	Avg	Max	Min	Max/Min	Avg/Min
Car Parking	1.9 fc	4.1 fc	0.7 fc	5.9:1	2.7:1
Entry Drive	1.9 fc	4.3 fc	0.6 fc	7.2:1	3.2:1
Path of Travel	2.6 fc	5.1 fc	1.1 fc	4.6:1	2.4:1
PL Prop to Prop	0.1 fc	0.9 fc	0.0 fc	N/A	N/A
PL street	0.5 fc	4.3 fc	0.0 fc	N/A	N/A
Sidewalk near Bldg	2.1 fc	4.2 fc	0.6 fc	7.0:1	3.5:1
Tarmac	1.7 fc	4.8 fc	0.2 fc	24.0:1	8.5:1
Trailer Storage	1.4 fc	4.2 fc	0.1 fc	42.0:1	14.0:1
Road	1.4 fc	4.1 fc	0.3 fc	13.7:1	4.7:1
Sidewalk along road	2.0 fc	4.5 fc	0.6 fc	7.5:1	3.3:1

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lumens Per Lamp	Light Loss Factor	Footage
	V8QW-2-700mA	4	U.S. ARCHITECTURAL LIGHTING	U.S.A.L.024/024W/024E/024A/024K	CAST BLACK PAINTED FINISHED METAL HOLDING	280	0.8	31.2
	III-W-525mA	8	U.S. ARCHITECTURAL LIGHTING	U.S.A.L.024/024W/024E/024A/024K	CAST BLACK PAINTED FINISHED METAL HOLDING	160	0.8	15.6
	IV-HS-700mA	8	U.S. ARCHITECTURAL LIGHTING	U.S.A.L.024/024W/024E/024A/024K	CAST BLACK PAINTED FINISHED METAL HOLDING	160	0.8	15.6
	IV-HS-Wall-700mA	8	U.S. ARCHITECTURAL LIGHTING	U.S.A.L.024/024W/024E/024A/024K	CAST BLACK PAINTED FINISHED METAL HOLDING	280	0.71	11.38
	IIIW	7	U.S. ARCHITECTURAL LIGHTING	U.S.A.L.024/024W/024E/024A/024K	CAST BLACK PAINTED FINISHED METAL HOLDING	323	0.8	28.6

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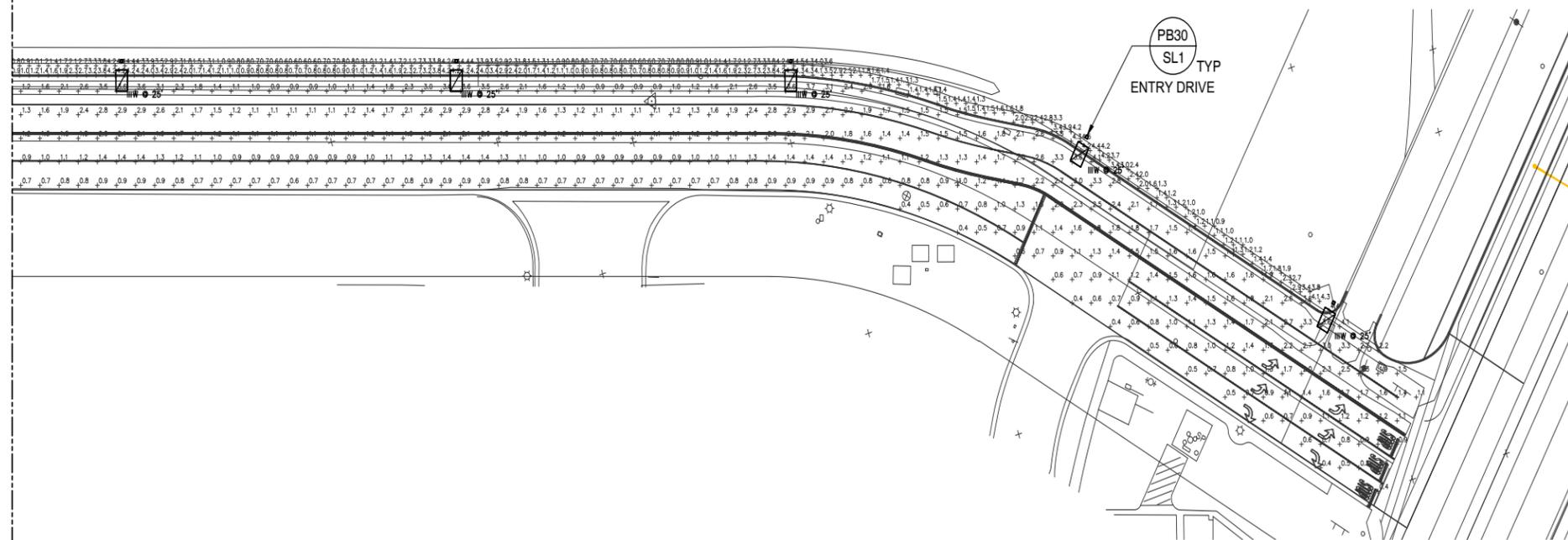
SOURCE: K2M Engineering 2022



FIGURE 3.1-1a
Preliminary Photometric Plan - Proposed Facility
Meridian D-1 Gateway Aviation Center Project

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A ENTRY DRIVE PLAN

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3.2 Air Quality

This section analyzes the existing air quality conditions of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, evaluates potential impacts on air quality resulting from construction and operation of the Proposed Project, and identifies required mitigation measures for the Proposed Project. The following reports were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Meridian D-1 Gateway Aviation Center Air Quality Impact Analysis (Air Quality Report) prepared by Urban Crossroads in April 2024 (Appendix B-1)
- Meridian D-1 Gateway Aviation Center Opening Year Emissions Comparison Memorandum (Opening Year Emissions Memo) prepared by Urban Crossroads in April 2023 (Appendix B-2)
- Meridian D-1 Gateway Aviation Center Health Risk Assessment (HRA) prepared by Urban Crossroads in March 2024 (Appendix C-1)
- Amicus Curiae Briefs of the South Coast Air Quality Management District and the San Joaquin Valley Air Pollution Control District in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (*Friant Ranch*) (Appendix C-2)
- Gateway Aviation Traffic Analysis: March Joint Powers Authority (JPA) (Traffic Analysis) prepared by Urban Crossroads in July 2023 (Appendix M-1)

Other sources consulted are listed in Section 3.2.9, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March JPA. The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day (34 operations per day), 6 days per week (non-peak). During the holiday season (i.e., late November through late December), increased aircraft operations would be anticipated (estimated to result in an additional 128 two-way flights [256 flight operations] over a 4-week period); however, the maximum annual aircraft operations would not exceed the currently available civilian air cargo operations capacity under the Joint Use Agreement.¹ Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.). Because there is no proposed tenant at this time, the proposed flight operations scenarios reflect a fleet consisting of Boeing 767-300 aircraft, which is a typical plane utilized in air cargo operations.

The analysis in this section is based on emission calculations using standard air quality models, including the California Emissions Estimator Model (CalEEMod), the California Air Resources Board (CARB) mobile source model Emission Factor (EMFAC) 2021, the CARB Hotspots Analysis and Reporting Program (HARP2) Risk Assessment Standalone Tool, the Federal Aviation Administration (FAA) Aviation Environmental Design Tool (AEDT) Version 3C, and the American Meteorological Society/U.S. Environmental Protection Agency (EPA) Regulatory Model (AERMOD). Project-specific information regarding construction and operations was used in the analysis.

¹ The current capacity of annual civilian air cargo operations is approximately 21,000 flight operations.

3.2.1 Existing Conditions

3.2.1.1 Air Quality Characteristics

South Coast Air Basin

The project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) (CARB 2014). The SCAQMD was created by the 1977 Lewis–Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the act, SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. The SCAB is a 6,745-square-mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County.

The SCAB is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and the San Diego Air Basin to the south.

Regional Climate

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence air quality.

The annual average temperatures throughout the SCAB vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures than the rest of the air basin. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of the SCAB's climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO₂) to sulfates (SO₄) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Because the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately 9 inches in Riverside to 14 inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB, with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year, there are approximately slightly greater than 14 hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subject to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings 5 to 10 periods of strong, dry offshore winds, locally termed “Santa Ana winds,” each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal: typified by a daytime onshore sea breeze and a nighttime offshore wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over Southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the “Catalina eddy,” a low-level cyclonic (counterclockwise) flow centered over Santa Catalina Island that results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections of the SCAB.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing, which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion type forms in conjunction with the drainage of cool air off the surrounding mountains at night, followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as oxides of nitrogen (NO_x) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline (Appendix B-1).

Wind Patterns

The distinctive climate of the SCAB, including the project site, is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter.

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light, although the speed is somewhat greater during the dry summer months than during the rainy winter season (Appendix B-1).

Existing Air Quality

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion for the pollutants. Reduced visibility, eye irritation, and adverse health impacts on people who are deemed sensitive receptors are the most serious hazards that can result from changes in existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, older adults, and people with cardiovascular and chronic respiratory diseases. According to

SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRAs]) throughout the district to provide Southern California residents with information on the air quality conditions. The project site is located within SRA 24, Perris Valley. Within SRA 24, the SCAQMD Perris Valley monitoring station is located 5.7 miles south of the project site and is the nearest long-term air quality monitoring site for ozone (O₃) and coarse particulate matter (particulate matter less than or equal to 10 microns in diameter, or PM₁₀). The Perris Valley monitoring station does not include data for CO, nitrogen dioxide (NO₂), or fine particulate matter (particulate matter less than or equal to 2.5 microns in diameter, or PM_{2.5}). The Metropolitan Riverside County monitoring station, located in SRA 23, is the next nearest monitoring station for CO, NO₂, and PM_{2.5}, and is located approximately 12.7 miles northwest of the project site. The Metropolitan Riverside County monitoring station was used in lieu of the Perris Valley monitoring station only in instances where data were not available from the Perris Valley station.

The most recent 3 years of data available are shown in Table 3.2-1 and identify the number of days ambient air quality standards were exceeded for the air monitoring area, which is considered to be representative of the local air quality at the project site. Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} for 2020 through 2022 were obtained from the SCAQMD Air Quality Data Tables (SCAQMD 2023a). Data for SO₂ have been omitted because attainment is regularly met in the SCAB and few monitoring stations measure SO₂ concentrations.

Table 3.2-1. Project Site Air Quality Monitoring Summary 2020-2022

Pollutant	Standard	Year		
		2020	2021	2022
O₃				
Maximum federal 1-hour concentration (ppm)	N/A	0.125	0.117	0.122
Maximum federal 8-hour concentration (ppm)	N/A	0.106	0.097	0.095
Number of days exceeding state 1-hour standard	>0.09 ppm	34	20	30
Number of days exceeding state/federal 8-hour standard	>0.070 ppm	74	57	70
CO				
Maximum federal 1-hour concentration	>35 ppm	1.9	2.1	3.3
Maximum federal 8-hour concentration	>20 ppm	1.4	1.8	1.2
NO₂				
Maximum federal 1-hour concentration	>0.100 ppm	0.066	0.052	0.056
Annual federal standard design value	N/A	0.014	0.014	0.013
PM₁₀				
Maximum federal 24-hour concentration (µg/m ³)	>150 µg/m ³	92	76	153
Annual federal arithmetic mean (µg/m ³)	N/A	33.4	34.2	37.0
Number of days exceeding federal 24-hour standard	>150 µg/m ³	0	0	0
Number of days exceeding state 24-hour standard	>50 µg/m ³	6	16	55

Table 3.2-1. Project Site Air Quality Monitoring Summary 2020-2022

Pollutant	Standard	Year		
		2020	2021	2022
PM_{2.5}				
Maximum federal 24-hour concentration ($\mu\text{g}/\text{m}^3$)	>35 $\mu\text{g}/\text{m}^3$	41.00	82.10	38.5
Annual federal arithmetic mean ($\mu\text{g}/\text{m}^3$)	>12 $\mu\text{g}/\text{m}^3$	12.63	12.58	10.80
Number of days exceeding federal 24-hour standard	>35 $\mu\text{g}/\text{m}^3$	4	10	1

Source: Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} was obtained from SCAQMD Air Quality Data Tables (SCAQMD 2023a).

Notes: O₃ = ozone; ppm = parts per million; N/A = not applicable; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM₁₀ = coarse particulate matter; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; PM_{2.5} = fine particulate matter.

Local Attainment Status

Pursuant to the 1990 federal Clean Air Act Amendments, EPA classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as “attainment” for that pollutant. If an area exceeds the standard, the area is classified as “nonattainment” for that pollutant. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated as “unclassified” or “unclassifiable.” The designation of “unclassifiable/attainment” means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as “maintenance areas” and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as “attainment” or “nonattainment,” but based on the California Ambient Air Quality Standards (CAAQS) rather than the NAAQS.

The entire SCAB is designated as a nonattainment area for federal and state O₃ standards. EPA has classified the SCAB as an extreme nonattainment area and has mandated that it achieve attainment no later than June 15, 2024. The SCAB is designated as an attainment area for state and federal CO, NO₂, and SO₂ standards. Only the Los Angeles County portion of the SCAB has been designated as nonattainment for the federal rolling 3-month-average lead standard, and the SCAB is designated attainment for the state lead standard. The SCAB is designated as a nonattainment area for state PM₁₀ standards; however, it is designated as an attainment area for federal standards. Regarding PM_{2.5} attainment status, the SCAB is designated as a nonattainment area by CARB and EPA (CARB 2020; EPA 2022). The attainment classifications for these criteria pollutants are outlined in Table 3.2-2.

Table 3.2-2. South Coast Air Basin Attainment Classifications

Pollutant	Averaging Time	Designation/Classification
Federal Standards		
O ₃	8 hours	Nonattainment/extreme
NO ₂	1 hour	Unclassifiable/attainment
	Annual arithmetic mean	Attainment (maintenance)
CO	1 hour; 8 hours	Unclassifiable/attainment
SO ₂	24 hours; annual arithmetic mean	Unclassifiable/attainment
PM ₁₀	24 hours	Attainment (maintenance)
PM _{2.5}	24 hours; annual arithmetic mean	Nonattainment (serious)

Table 3.2-2. South Coast Air Basin Attainment Classifications

Pollutant	Averaging Time	Designation/Classification
Lead	Quarter	Unclassifiable/attainment
	3-month average	Nonattainment (partial) ^a
State Standards		
O ₃	1 hour; 8 hours	Nonattainment
NO ₂	1 hour; annual arithmetic mean	Attainment (partial) ^b
CO	1 hour; 8 hours	Attainment
SO ₂	1 hour; 24 hours	Attainment
PM ₁₀	24 hours; annual arithmetic mean	Nonattainment
PM _{2.5}	Annual arithmetic mean	Nonattainment
Lead ^c	30-day average	Attainment
Sulfates (SO ₄)	24 hours	Attainment
Hydrogen sulfide (H ₂ S)	1 hour	Unclassified
Vinyl chloride ^c	24 hours	No designation
Visibility-reducing particles	8 hours (10:00 a.m.–6:00 p.m.)	Unclassified

Sources: USEPA 2022 (federal); CARB 2020 (California).

Notes: O₃ = ozone; NO₂ = nitrogen dioxide; CO = carbon monoxide; SO₂ = sulfur dioxide; PM₁₀ = fine particulate matter; PM_{2.5} = coarse particulate matter.

- ^a Partial nonattainment designation – Los Angeles County portion of air basin only for near-source monitors. Expected to remain in attainment based on current monitoring data.
- ^b The area of State Route 60 between San Bernardino and Riverside Counties is designated as a nonattainment area for NO₂. However, the project site is not located within this nonattainment area and is instead located in an attainment area for NO₂.
- ^c CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure for adverse health effects determined.

MATES V

The Multiple Air Toxics Exposure Study V (MATES V) is a monitoring and evaluation study conducted in the SCAB. The study is a follow-up to previous air toxics studies in the SCAB and is part of the SCAQMD Governing Board Environmental Justice Initiative.

The MATES V consists of several elements including a monitoring program, an updated emissions inventory of toxic air contaminants (TACs), and a modeling effort to characterize risk across the SCAB. The study estimates air toxics cancer risks using a risk assessment approach. Additionally, MATES V includes an exploratory analysis of chronic non-cancer health impacts (e.g., cardiovascular, respiratory, neurological health outcomes). The MATES V analysis does not estimate impacts on mortality risk or other health effects from criteria air pollutant exposures; such analyses are instead conducted as part of SCAQMD's air quality management plans (AQMPs).

Toxic air pollution in the SCAB has decreased by more than 54% between 2012 and 2018, but continues to contribute to health risks, including cancers and other chronic diseases. For residents in the SCAB in 2018, exposure to TACs increased the chances of developing cancer by 455 chances in one million.

In the project site's zip code, 92518, the MATES V monitoring shows a cancer risk of 359 chances in one million. Air toxics cancer risk in this zip code is higher than 22% of the SCAQMD population (SCAQMD 2023b).

CalEnviroScreen

CalEnviroScreen is a mapping tool that helps identify California communities that are most affected by many sources of pollution, where people are often especially vulnerable to pollution's effects. CalEnviroScreen ranks census tracts in California based on potential exposures to pollutants, adverse environmental conditions, socioeconomic factors, and the prevalence of certain health conditions. Data used in the CalEnviroScreen model come from national and state sources.

The project site is in a disadvantaged community pursuant to Senate Bill 535 (De León, Chapter 830, Statutes of 2012), which directs state and local agencies to make investments that benefit California's disadvantaged communities. Senate Bill 535 requires that 25% of the Greenhouse Gas Reduction Fund from the Cap and Trade Program is spent on projects that benefit disadvantaged communities, while at least 10% of the 25% is spent on projects located in disadvantaged communities.

The project site is in a Low-Income Community pursuant to Assembly Bill (AB) 1550 but is not in a Community Air Protection Program pursuant to AB 617.

The project site's census tract achieves a score of 98.1 on CalEnviroScreen 4.0. The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Healthy Places

The Healthy Places Index (HPI) is a project of the Public Health Alliance of Southern California. The HPI is a policy platform created to advance health equity through open and accessible data. Neighborhood by neighborhood, the HPI maps data on social conditions that drive health, such as education, job opportunities, clean air and water, and other indicators that are positively associated with life expectancy at birth. Community leaders, policy makers, academics, and other interested parties use the HPI to compare the health and well-being of communities, identify health inequities, and quantify the factors that shape health.

The project site's zip code is excluded from the HPI but the zip code adjacent to the project site (92551) has an HPI score of 23.2. The maximum HPI score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

3.2.1.2 Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O₃, NO₂, CO, SO₂, PM₁₀, PM_{2.5}, and lead. These pollutants, as well as TACs,

are discussed in the following paragraphs.² In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O₃ is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O₃ precursors. These precursors are mainly NO_x and volatile organic compounds (VOCs). The maximum effects of precursor emissions on O₃ concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O₃ formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O₃ exists in the upper atmosphere O₃ layer (stratospheric O₃) and at the Earth's surface in the troposphere (ground-level O₃).³ The O₃ that EPA and CARB regulate as a criteria air pollutant is produced close to ground level, where people live, exercise, and breathe. Ground-level O₃ is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" O₃. Stratospheric, or "good," O₃ occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O₃ layer, plant and animal life would be seriously harmed.

O₃ in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O₃ at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2016). These health problems are particularly acute in sensitive receptors such as sick people, older adults, and young children.

Nitrogen Dioxide. NO₂ is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO₂ in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O₃. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources, such as electric utility and industrial boilers.

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO₂ at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO₂ in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these subgroups.

In animals, exposure to levels of NO₂ considerably higher than ambient concentrations results in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O₃ exposure increases when animals are exposed to a combination of O₃ and NO₂.

² The descriptions of each of the criteria air pollutants and associated health effects are based on EPA's Six Common Air Pollutants (EPA 2016) and CARB's Glossary of Air Pollution Terms (CARB 2016).

³ The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward approximately 5 miles at the poles and 10 miles at the equator.

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbons, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November through February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO₂ is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO₂ are coal and oil used in power plants and industries; as such, the highest levels of SO₂ are generally found near large industrial complexes. In recent years, SO₂ concentrations have been reduced by the increasingly stringent controls placed on stationary-source emissions of SO₂ and limits on the sulfur content of fuels.

SO₂ is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. When combined with particulate matter, SO₂ can injure lung tissue and reduce visibility and the level of sunlight. SO₂ can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM_{2.5} and PM₁₀ represent fractions of particulate matter. Coarse particulate matter (PM₁₀) consists of particulate matter that is 10 microns or less in diameter and is about 1/7 the thickness of a human hair. Major sources of PM₁₀ include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter (PM_{2.5}) consists of particulate matter that is 2.5 microns or less in diameter and is roughly 1/28 the diameter of a human hair. PM_{2.5} results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, PM_{2.5} can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs.

PM_{2.5} and PM₁₀ pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM_{2.5} and PM₁₀ can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates, can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases, such as chlorides or ammonium, into the lungs, also causing injury. PM₁₀ tends to collect in the upper portion of the respiratory system, and PM_{2.5} is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

People with influenza, people with chronic respiratory and cardiovascular diseases, and older adults may suffer worsening illness and premature death as a result of breathing particulate matter. People with bronchitis can expect aggravated symptoms from breathing in particulate matter. Children may experience a decline in lung function due to breathing in PM₁₀ and PM_{2.5} (EPA 2016).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and, in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O₃ are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O₃ and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

Non-Criteria Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics “Hot Spots” Information and Assessment Act, AB 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hot spots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter. Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micron in diameter (about 1/70th the diameter of a human hair), and thus is a subset of PM_{2.5} (CARB 2016). DPM is typically composed of carbon particles (“soot,” also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2016). CARB classified “particulate emissions from diesel-fueled engines” (i.e., DPM) (17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines, including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2009). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2009). Because it is part of PM_{2.5}, DPM also contributes to the same non-cancer health effects as PM_{2.5} exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2016). Those most vulnerable to non-cancer health effects are children, whose lungs are still developing, and older adults, who often have chronic health problems.

Odorous Compounds. Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person’s reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

3.2.2 Relevant Plans, Policies, and Ordinances

Regulatory oversight for air quality in the SCAB is maintained by EPA at the federal level, CARB at the state level, and SCAQMD at the local level. Applicable laws, regulations, and standards of these three agencies are described in the following subsections.

Federal

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. EPA is responsible for implementing most aspects of the Clean Air Act, including the setting of the NAAQS (federal standards) for major air pollutants, hazardous air pollutant (HAP) standards, approval of state

attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric O₃ protection, and enforcement provisions. Federal standards are established for criteria pollutants under the Clean Air Act, which are O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead.

The federal standards describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The federal standards (other than for O₃, NO₂, SO₂, PM₁₀, and PM_{2.5}, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. Federal standards for O₃, NO₂, SO₂, PM₁₀, and PM_{2.5} are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires EPA to reassess the federal standards at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the federal standards must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the federal standards to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels.

The 1977 federal Clean Air Act Amendments required EPA to identify national emissions standards for HAPs to protect public health and welfare. HAPs include certain VOCs, pesticides, herbicides, and radionuclides that present a tangible hazard based on scientific studies of exposure of humans and other mammals to these substances. Under the 1990 federal Clean Air Act Amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

March Air Reserve Base

The following policies apply to March ARB:

- **Air Force Instruction (AFI) 32-7040, Air Quality Compliance and Resource Management Program.** AFI 32-7040 implements Air Force Policy Directive (AFPD) 32-70, Environmental Quality. The instruction provides details of the Air Force Air Quality Compliance and Resource Management Program and explains how to assess, attain, and sustain compliance with the Clean Air Act; other federal, state, and local environmental regulations; Final Governing Standards, or the Overseas Environmental Baseline Guidance Document; applicable international agreements; and related Department of Defense and Department of the Air Force (DAF) directives.
- **Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide – Fundamentals, Volume 1 of 2.** The EIAP Guide (DAF 2016) provides guidance in assessing the air quality impact associated with DAF proposed actions (activities that DAF or an instrumentality of DAF engages in or supports in any way; e.g., construction project, permits applications, land management).
- **General Conformity Rule (GCR, 40 CFR 93 Subpart B).** The GCR applies to all other (i.e., non-federal highway and non-transit actions) federal actions. For DAF actions that do not impact federal highway and transit, only the GCR applies. Therefore, the GCR applies to all DAF actions in nonattainment or maintenance areas.

State

CARB, which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal Clean Air Act, and regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources to attain the CAAQS by the earliest practical date. CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However, at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (CARB 2018; EPA 2018). The federal and state standards are presented in Table 3.2-3.

The state Air Toxics Program was established in 1983 under AB 1807. The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. The Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) was enacted by the legislature to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hot spots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. “High-priority” facilities are required to perform an HRA, and if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

Table 3.2-3. Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS ^a	NAAQS ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
O ₃	1 hour	0.09 ppm (180 µg/m ³)	—	Same as primary standard ^f
	8 hours	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³) ^f	
NO ₂ ^g	1 hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	
CO	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None
	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	
SO ₂ ^h	1 hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m ³)
	24 hours	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ^g	—
	Annual	—	0.030 ppm (for certain areas) ^g	—

Table 3.2-3. Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS ^a	NAAQS ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
PM ₁₀ ⁱ	24 hours	50 µg/m ³	150 µg/m ³	Same as primary standard
	Annual arithmetic mean	20 µg/m ³	—	
PM _{2.5} ⁱ	24 hours	—	35 µg/m ³	Same as primary standard
	Annual arithmetic mean	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
Lead ^{i,k}	30-day average	1.5 µg/m ³	—	—
	Calendar quarter	—	1.5 µg/m ³ (for certain areas) ^k	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m ³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m ³)	—	—
Vinyl chloride ^l	24 hours	0.01 ppm (26 µg/m ³)	—	—
Sulfates	24 hours	25 µg/m ³	—	—
Visibility reducing particles	8 hours (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2019a.

Notes: CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards; O₃ = ozone; µg/m³ = micrograms per cubic meter; ppm = parts per million by volume; NO₂ = nitrogen dioxide; CO = carbon monoxide; mg/m³ = milligrams per cubic meter; SO₂ = sulfur dioxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; PST = Pacific Standard Time.

- ^a CAAQS for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, and suspended particulate matter (PM₁₀, PM_{2.5}, and visibility-reducing particles) are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in 17 CCR 70200.
- ^b NAAQS (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
- ^c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 °C (77 °F) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25 °C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ^d Primary NAAQS: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ^e Secondary NAAQS: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ^f On October 1, 2015, the primary and secondary NAAQS for O₃ were lowered from 0.075 ppm to 0.070 ppm
- ^g To attain the 1-hour NAAQS, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the 1-hour NAAQS is in units of ppb. CAAQS are in units of parts per million (ppm). To directly compare the 1-hour NAAQS to the CAAQS, the units can be converted from ppb to ppm. In this case, the NAAQS of 100 ppb is identical to 0.100 ppm.
- ^h On June 2, 2010, a new 1-hour SO₂ NAAQS was established and the existing 24-hour and annual primary NAAQS were revoked. To attain the 1-hour NAAQS, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each

site must not exceed 75 ppb. The 1971 SO₂ NAAQS (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 NAAQS, except that in areas designated nonattainment of the 1971 NAAQS, the 1971 NAAQS remain in effect until implementation plans to attain or maintain the 2010 NAAQS are approved.

- i On December 14, 2012, the annual PM_{2.5} primary NAAQS was lowered from 15 µg/m³ to 12.0 µg/m³. The existing 24-hour PM_{2.5} NAAQS (primary and secondary) were retained at 35 µg/m³, as was the annual secondary NAAQS of 15 µg/m³. The existing 24-hour PM₁₀ NAAQS (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary NAAQS is the annual mean, averaged over 3 years.
- j CARB has identified lead and vinyl chloride as toxic air contaminants (TACs) with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- k The NAAQS for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead NAAQS (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 NAAQS, except that in areas designated nonattainment for the 1978 NAAQS, the 1978 NAAQS remains in effect until implementation plans to attain or maintain the 2008 NAAQS are approved.

In 2000, CARB approved a comprehensive diesel risk reduction plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. All of these regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. Several Airborne Toxic Control Measures would reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

Local

South Coast Air Quality Management District

SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SCAB, where the project site is located. SCAQMD operates monitoring stations in the SCAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. SCAQMD's AQMPs include control measures and strategies to be implemented to attain the NAAQS and CAAQS in the SCAB. SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

The 2022 AQMP was adopted by the SCAQMD governing board on December 2, 2022, and builds on measures already in place from previous AQMPs. It also includes additional strategies, such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies and low NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency programs), incentives, and other Clean Air Act measures to achieve the 2015 8-hour O₃ standard (SCAQMD 2022). The SCAQMD 2022 AQMP applies the Southern California Association of Governments (SCAG) growth forecasts assumed in the 2020–2045 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) (Connect SoCal; SCAG 2020). The primary purpose of the 2022 AQMP is to identify, develop, and implement strategies and control measures to meet the 2015 8-hour O₃ NAAQS of 70 parts per billion (ppb) as expeditiously as practicable, but no later than the statutory attainment deadline of August 3, 2038, for the SCAB and August 3, 2033, for the Riverside County portion of the Salton Sea Air Basin (referred to as the Coachella Valley Planning Area, or Coachella Valley) (SCAQMD 2022).

Potentially Applicable Rules

Emissions that would result from stationary and area sources during construction and operation under the Proposed Project may be subject to SCAQMD rules and regulations. The SCAQMD rules applicable to the Proposed Project may include the following:

Rule 201: Permit to Construct. This rule establishes an orderly procedure for the review of new and modified sources of air pollution through the issuance of permits. Rule 201 specifies that any facility installing nonexempt equipment that causes or controls the emissions of air pollutants must first obtain a permit to construct from SCAQMD (SCAQMD 2004a).

Rule 203: Permit to Operate. This rule requires any equipment that may cause the issuance of air contaminants, or the use of which may reduce or control the issuance of air contaminants, to obtain a written permit to operate, and shall be operated to the conditions specified in the permit to operate (SCAQMD 2004b).

Rule 401: Visible Emissions. This rule establishes the limit for visible emissions from stationary sources (SCAQMD 2001).

Rule 402: Nuisance. This rule prohibits the discharge of air pollutants from a facility that cause injury, detriment, nuisance, or annoyance to the public or damage to business or property (SCAQMD 1976).

Rule 403: Fugitive Dust. This rule requires fugitive dust sources to implement best available control measures for all sources to ensure all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust (SCAQMD 2005).

Rule 431.2: Sulfur Content of Liquid Fuel. The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of SO_x and particulates during combustion and enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers, such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the district. The rule also affects diesel fuel supplied for mobile-source applications (SCAQMD 2000).

Rule 1113: Architectural Coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SCAQMD 2016).

Rule 2305: Warehouse Indirect Source Rule. This rule requires warehouses greater than 100,000 square feet to directly reduce NO_x and DPM emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities (SCAQMD 2021).

Regulation XIV: Toxics and Other Non-Criteria Pollutants. This regulation includes rules that regulate toxics and other non-criteria pollutants. It provides specifications for maximum individual cancer risk, cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units that emit TACs. The rules establish allowable risks for permit units requiring new permits pursuant to Rules 201 or 203 (SCAQMD 2017a).

March Joint Powers Authority General Plan

The Noise/Air Quality Element of the adopted March JPA General Plan includes goals and policies related to air quality (March JPA 1999) that would be applicable to the Proposed Project. Consistency with these goals and policies is discussed in Section 3.10, Land Use and Planning. The following goals and policies from the March JPA General Plan would apply to the Proposed Project (March JPA 1999):

Goal 6: Reduce emissions associated with vehicle/engine use.

Policy 6.1: Reduce idling emissions by increasing traffic flow through synchronized traffic signals.

Policy 6.3: Encourage diversion of peak hour truck traffic, whenever feasible, to off-peak periods to reduce roadway congestion and associated emissions.

Policy 6.4: Work with Caltrans and traffic engineers to insure that roadways and freeway on-ramps that are heavily utilized by trucks are designed to safely accommodate trucks.

Policy 6.5: Encourage trucks operating within March JPA Planning Area to maintain safety equipment and operate at safe speeds so as to reduce the potential for accidents which create congestion and related emissions.

Policy 6.6: Reduce vehicle emissions through improved parking design and management that provide for safe pedestrian access to and from various facilities.

Policy 6.8: Encourage the use of compressed natural gas, clean diesel and/or alternative fuels in engines.

Goal 8: Reduce air pollution emissions and impacts through siting and building design.

Policy 8.1: Support the use of low polluting construction materials and coatings.

Policy 8.3: Encourage the separation of sensitive receptors from potential carbon monoxide hotspots.

Goal 9: Reduce fugitive dust and particulate matter emissions.

Policy 9.1: Require all feasible fugitive dust reduction techniques to be utilized during construction activities.

Policy 9.3: Support land division design which minimizes grading and maintains the natural topography to the maximum extent feasible.

Environmental Justice Element

In April 2024, March JPA adopted an Environmental Justice Element for its General Plan (March JPA 2024). The Environmental Justice Element incorporates the environmental justice policies of the County of Riverside Healthy Communities Element pursuant to California Government Code Section 65301(a). The County of Riverside Board of Supervisors adopted environmental justice policies by Resolution 2021-182 on September 21, 2021. The goal of the Environmental Justice Element is to ensure the consideration of environmental justice policies to improve public health and the environment within the March JPA Planning Area. Policies and new land use development proposed within the March JPA Planning Area will be evaluated for promoting all environmental justice policies. The

land use entitlement process provides a key opportunity to address environmental justice policies through the creation of safe, healthy, and environmentally sustainable communities. The following draft goals and policies would be relevant to the Proposed Project:

Goal: Health Risk Reduction (e.g., Food Access, Safe and Sanitary Homes, Physical Activity, and Reduce Pollution exposure)

This goal includes policies that work towards reducing unique and compounded health risks.

The following policies address pollution exposure:

Policy HC 16.5: Evaluate the compatibility of unhealthy and polluting land uses being located near sensitive receptors including possible impacts on ingress, egress, and access routes. Similarly, encourage sensitive receptors, such as housing, schools, hospitals, clinics, and childcare facilities to be located away from uses that pose potential hazards to human health and safety.

Policy HC 16.14: Assure that sensitive receptors are separated and protected from polluting point sources, as feasible, including agricultural businesses that produce or use pesticides and chemical fertilizers.

Policy HC 16.15: Assure that site plan design protects people and land, particularly sensitive land uses such as housing and schools, from air pollution and other externalities associated with industrial and warehouse development through the use of barriers, distance, or similar solutions or measures from emission sources when possible.

Policy HC 16.16: Apply pollution control measures such as landscaping, vegetation, and green zones (in cooperation with the SCAQMD) and other materials, which trap particulate matter or control air pollution.

Policy HC 16.18: Promote new development that emphasizes job creation and reduction in vehicle miles traveled in job-poor areas and does not otherwise contribute to onsite emissions in order to improve air quality.

Policy HC 16.23: Discourage industrial and agricultural uses which produce significant quantities of toxic emissions into the air, soil, and groundwater to prevent the contamination of these physical environments.

Policy HC 16.24: Ensure compatibility between industrial development and agricultural uses and adjacent land uses. To achieve compatibility, industrial development and agricultural uses will be required to include criteria addressing noise, land, traffic and greenhouse gas emissions to avoid or minimize creating adverse conditions for adjacent communities.

3.2.3 Thresholds of Significance

CEQA Thresholds

The significance criteria used to evaluate the Proposed Project's impacts to air quality are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, as applicable, the March JPA CEQA Guidelines (March JPA 2022). For the purposes of the analysis in this EIR, a significant impact related to air quality emissions would occur if the Proposed Project would:

AQ-1 *Conflict with or obstruct implementation of the applicable air quality plan.*

AQ-2 *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.*

AQ-3 *Expose sensitive receptors to substantial pollutant concentrations.*

AQ-4 *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

To assist in determining the significance of air quality impacts, SCAQMD published its Air Quality Significance Thresholds (SCAQMD 2019a) (see Table 3.2-4).

Table 3.2-4. SCAQMD Air Quality Significance Thresholds

Pollutant	Construction Regional Thresholds	Operation Regional Thresholds
Criteria Pollutants Mass Daily Thresholds (Pounds per Day)		
VOCs	75	55
NO _x	100	55
CO	550	550
SO _x	150	150
PM ₁₀	150	150
PM _{2.5}	55	55
Lead	3	3
TACs and Odor Thresholds		
TACs ^a	Maximum incremental cancer risk ≥ 10 in 1 million Chronic and acute hazard index ≥ 1.0 (project increment) Cancer burden >0.5 excess cancer cases (in areas ≥ 1 in 1 million)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants^b		
NO ₂ 1-hour average NO ₂ annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (CAAQS) 0.030 ppm (CAAQS) and 0.0534 ppm (NAAQS)	
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (CAAQS) and 35 ppm (NAAQS) 9.0 ppm (CAAQS/federal)	

Table 3.2-4. SCAQMD Air Quality Significance Thresholds

Pollutant	Construction Regional Thresholds	Operation Regional Thresholds
PM ₁₀ 24-hour average	10.4 µg/m ³ (construction) ^c 2.5 µg/m ³ (operation)	
PM ₁₀ annual average	1.0 µg/m ³	
PM _{2.5} 24-hour average	10.4 µg/m ³ (construction) ^c 2.5 µg/m ³ (operation)	

Source: SCAQMD 2019a.

Notes: SCAQMD = South Coast Air Quality Management District; VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; TAC = toxic air contaminant; NO₂ = nitrogen dioxide; ppm = parts per million; CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards; µg/m³ = micrograms per cubic meter.

^a TACs include carcinogens and noncarcinogens.

^b Ambient air quality standards for criteria pollutants based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.

^c Ambient air quality threshold based on SCAQMD Rule 403.

Regional Significance Thresholds

SCAQMD's CEQA Air Quality Significance Thresholds indicate that any project in the SCAB with daily emissions that exceed any of the indicated thresholds in Table 3.2-4 should be considered as having an individually and cumulatively significant air quality impact.

The VOC and NO_x emission-based thresholds for O₃ precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O₃ impacts to occur) because O₃ itself is not emitted directly (see the previous discussion of O₃ and its sources), and the effects of an individual project's emissions of O₃ precursors (VOC and NO_x) on O₃ levels in ambient air cannot be determined through air quality models or other quantitative methods.

Per the CalEEMod User Guide, CalEEMod quantifies all criteria pollutants except lead (Pb), O₃, and NO_x. Lead is associated with some industrial sources and processes. Specific details to support broad quantification of these emissions are not currently available for CalEEMod. The Proposed Project is not expected to generate a quantifiable amount of lead emissions; therefore, further evaluation of lead emissions is not warranted.

Construction Localized Significance Threshold

In addition to the emission-based thresholds in Table 3.2-4, the SCAQMD also recommends evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of a project as a result of construction and operation activities. Such an evaluation is referred to as a localized significance threshold (LST) analysis.

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, older adults, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as "sensitive receptors." These structures typically include residences, hotels, hospitals, and other facilities known to be locations where an individual can remain for 24 hours. Consistent with the LST methodology (SCAQMD 2008), the nearest land use to the project site where an individual could remain for 24 hours (in this case, the nearest residential land use) was used to determine construction and operational air quality impacts for emissions of PM₁₀ and PM_{2.5}, because PM₁₀ and PM_{2.5} thresholds are based on a 24-hour averaging time.

While the CAAQS/NAAQS have been revised since publication of SCAQMD's LST methodology/guidance, it should be noted that the SCAQMD guidance remains current and valid. The LST thresholds established in the guidance are intended to be screening thresholds and thus are conservative. The thresholds were based on modeling performed by SCAQMD and background concentrations of pollutants in areas throughout the SCAB. Air quality has improved throughout the basin since the LST methodology/guidance release, which makes the LST thresholds described below more conservative. Furthermore, as noted below, the analysis concentrates the emissions on a smaller site, providing additional conservatism in the assessment.

For the Proposed Project, the appropriate SRA for the LST analysis is the SCAQMD Perris Valley (SRA 24). LSTs apply to CO, NO_x, PM₁₀, and PM_{2.5}. The SCAQMD produced lookup tables for projects less than or equal to 5 acres in size, but the lookup tables can be applied as a screening criterion for larger projects. As a conservative measure, it is assumed that a maximum of 20 acres per day can be actively disturbed. In CalEEMod, the "Total Acres Graded" field represents the cumulative distance traversed on the property by the grading equipment. To properly grade a piece of land, multiple passes with grading equipment may be required. So even though the lot size is a fixed number of acres, the total acres graded could be an order of magnitude higher than the footprint of the lot (CAPCOA 2017). Total acres graded is a function of the maximum acreage disturbed per day times the number of days of the subphase of construction. As such, the "Total Acres Graded" field in CalEEMod has been revised to 340 acres for site preparation (20 acres disturbed per day × 17 working days) and 640 acres for grading activities (20 acres disturbed per day × 32 working days).⁴ Because the lookup tables identify thresholds at only 1 acre, 2 acres, and 5 acres, linear regression was used to determine LSTs. The nearest sensitive receptors to the project site were identified and are further described in the Air Quality Report (Appendix B-1 to this EIR). The nearest land use to the project site where an individual could remain for 24 hours was used to determine localized construction and operational air quality impacts for emissions of PM₁₀ and PM_{2.5} (because PM₁₀ and PM_{2.5} thresholds are based on a 24-hour averaging time). The nearest existing residential sensitive receptor is located approximately 2,730 feet (832 meters) east of the project site. The lookup tables only identify thresholds up to a 500-meter (1,640-foot) distance. As a conservative measure, the 500-meter distance will be used in lieu of the 832-meter distance to evaluate localized PM₁₀ and PM_{2.5} emission impacts.

The nearest industrial/commercial use to the project site was used to determine construction and operational LST air impacts for emissions of NO_x and CO because the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assume that an individual could be present at these sites for periods of 1 to 8 hours. Thus, the nearest receptor used for evaluation of localized impacts of NO_x and CO is located 189 feet (58 meters) south of the project site. As such, the 58-meter distance was used for evaluation of localized NO_x and CO emission impacts.

Consistent with SCAQMD guidance, the thresholds presented in Table 3.2-5 were calculated by interpolating the threshold values for the Proposed Project's disturbed acreage.

Table 3.2-5. Maximum Daily Localized Construction Emissions Thresholds

Pollutant	Construction Localized Thresholds
NO _x	314 pounds per day
CO	2,379 pounds per day
PM ₁₀	207 pounds per day
PM _{2.5}	105 pounds per day

⁴ CalEEMod does not provide a "Total Acres Graded" field for Building Construction, Paving, or Architectural Coating activities.

Source: Appendix B-1.

Notes: NO_x = oxides of nitrogen; CO = carbon monoxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter.

Operational Localized Significance Threshold

As noted above, the SCAQMD LST methodology/guidance remains current and valid despite revisions to the CAAQS and NAAQS. Because of improving air quality throughout the SCAB since the release of the guidance in 2008, the LST thresholds provide a conservative screening threshold to determine potential impacts. The LST analysis is based on the project site, which is approximately 46 acres. Similar to the approach taken in determining the localized thresholds for construction activity, operational LSTs for a 5-acre site were used as a screening tool to determine whether further detailed analysis is required (Appendix B-1). Table 3.2-6 shows the maximum daily localized operational emissions thresholds.

Table 3.2-6. Maximum Daily Localized Operational Emissions Thresholds

Pollutant	Operational Localized Thresholds
NO _x	314 pounds per day
CO	2,379 pounds per day
PM ₁₀	50 pounds per day
PM _{2.5}	26 pounds per day

Source: Appendix B-1.

Notes: NO_x = oxides of nitrogen; CO = carbon monoxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter.

Toxic Air Contaminants Thresholds

SCAQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to exposure to TACs. This threshold serves to determine whether a given project has a potentially significant development-specific and cumulative impact.

SCAQMD has also established noncarcinogenic risk parameters for use in HRAs. Noncarcinogenic risks are quantified by calculating a “hazard index,” expressed as the ratio between the ambient pollutant concentration and its toxicity or reference exposure level. A reference exposure level is a concentration at or below which health effects are not likely to occur. A hazard index less of than 1.0 means that adverse health effects are not expected. Within this analysis, noncarcinogenic exposures of less than 1.0 are considered less than significant.

Carbon Monoxide Thresholds

An adverse CO concentration, known as a “hot spot,” would occur if an exceedance of the state 1-hour standard of 20 ppm or the 8-hour standard of 9 ppm were to occur. At the time of publication of the CEQA Air Quality Handbook (SCAQMD 1993), the SCAB was designated nonattainment under the CAAQS and NAAQS for CO (SCAQMD 2003b).

CO hot spots are caused by vehicular emissions, primarily when vehicles are idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams per mile for passenger cars (there are requirements for certain other vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment (CARB 2019b).

Conflicts with Applicable Air Quality Management Plan

The project site is located within the SCAB, which is characterized by relatively poor air quality. SCAQMD has jurisdiction over an approximately 10,743-square-mile area consisting of the four-county SCAB and the Los Angeles County and Riverside County portions of what used to be referred to as the Southeast Desert Air Basin. In these areas, SCAQMD is principally responsible for air pollution control and works directly with SCAG, county transportation commissions, local governments, and federal and state agencies to reduce emissions from stationary, mobile, and indirect sources to meet the CAAQS and NAAQS.

Currently, the CAAQS and NAAQS are exceeded in most parts of the SCAB. In response, SCAQMD has adopted a series of AQMPs to meet the CAAQS and NAAQS. AQMPs are updated regularly to more effectively reduce emissions, accommodate growth, and minimize any negative fiscal impacts of air pollution control on the economy.

Construction and operation of the development planned as part of the Proposed Project may result in emissions of short- and long-term criteria air pollutants in conflict with the SCAQMD AQMP.

SCAQMD has established criteria for determining consistency with an AQMP in Chapter 12, Sections 12.2 and 12.3, of the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993):

- **Consistency Criterion No. 1:** The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The proposed project will not exceed the assumptions in the AQMP or increments based on the year of project buildout phase.

Approach and Methodology

Land uses such as the Proposed Project affect air quality through construction- and operational-source emissions.

In May 2022, SCAQMD, in conjunction with the California Air Pollution Control Officers Association and other California air districts, released CalEEMod, Version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}) and greenhouse gas emissions from direct and indirect sources and quantify applicable air quality and greenhouse gas emission reductions achieved through mitigation measures (CAPCOA 2022). Accordingly, CalEEMod Version 2022.1 has been used for the current analysis to determine construction and operational air quality emissions resulting from the Proposed Project. Output from the model runs for both construction and operational activity is provided in Appendix B-1.

Construction On-Site and Off-Site Assumptions

The modeling prepared for the Proposed Project in the Meridian D-1 Gateway Aviation Center Air Quality Impact Analysis (Appendix B-1) assumed that construction would begin in June 2023 and be completed in March 2024. For purposes of analysis in this EIR, construction was assumed to commence in June 2024 and last through March 2025. The construction schedule used in the analysis, shown in Table 3.2-7, represents a conservative analysis scenario because emissions factors for construction decrease as time passes and the analysis year increases due

to emissions regulations becoming more stringent.⁵ The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet, as required per the CEQA Guidelines.

Table 3.2-7. Construction Schedule

Activity	Start Date	End Date	Days
Site preparation	06/01/2024	06/23/2024	17
Grading	07/01/2024	08/15/2024	32
Building construction	08/01/2024	02/28/2025	152
Paving	12/01/2024	01/30/2025	43
Architectural coating	02/15/2025	03/30/2025	32

Source: Appendix B-1.

Based on information provided by the project applicant, approximately 100,000 cubic yards of material will be imported from the Meridian South Campus site,⁶ which is approximately 8.3 miles from the project site. Construction emissions for construction worker vehicles traveling to and from the project site, as well as vendor trips (construction materials delivered to the project site), were estimated based on information from CalEEMod defaults. Site-specific construction fleet numbers and activities may vary due to specific Proposed Project needs at the time of construction. The associated construction equipment was based on CalEEMod 2022 defaults. Construction generates on-road vehicle emissions from vehicle usage for workers, hauling trucks, vendor trucks, and water trucks commuting to and from the site. A detailed summary of construction equipment assumptions by phase is provided in Table 3.2-8.

Table 3.2-8. Construction Equipment Assumptions

Activity	Equipment	Amount/Number	Hours Per Day	Horsepower	Load Factor
Site preparation	Crawler tractors	2	8	87	0.43
	Concrete/industrial saws	1	8	33	0.73
	Excavators	3	8	36	0.38
	Rubber-tired dozers	6	8	367	0.40
Grading	Crawler tractors	1	8	87	0.43
	Excavators	2	8	36	0.38
	Graders	3	8	148	0.41
	Rubber-tired dozers	1	8	367	0.40
	Scrapers	2	8	423	0.48
Building construction	Cranes	1	8	367	0.29
	Crawler tractors	3	8	87	0.43
	Forklifts	3	8	82	0.20
	Generator sets	1	8	14	0.74
	Welders	1	8	46	0.45
Paving	Pavers	2	8	81	0.42
	Paving equipment	2	8	89	0.36

⁵ As shown in the CalEEMod User's Guide Version 2022.1, Section 4.3, "OFFROAD Equipment," as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer, less-polluting equipment and new regulatory requirements.

⁶ Meridian South Campus is within the West March Planning Subarea, south of Van Buren Boulevard, as shown on Exhibit 1-3 of the Land Use Profile Report of the March JPA General Plan.

Table 3.2-8. Construction Equipment Assumptions

Activity	Equipment	Amount/ Number	Hours Per Day	Horsepower	Load Factor
	Rollers	2	8	36	0.38
Architectural coating	Air compressors	1	8	37	0.48

Source: Appendix B-1.

March ARB has established quiet hours outside of published operating hours (which are currently Monday through Saturday, 7:00 a.m. to 4:00 p.m.) and is closed Sundays (March ARB 2017, 2023). March JPA has established limits to the hours of construction. Section 9.10.030 of March JPA's Development Code provides that noise-generating construction activities can only occur between 7:00 a.m. and 7:00 p.m. As such, construction activities are permitted to occur up to 12 hours per day pursuant to March JPA's Development Code (March JPA 2016). However, the identified construction equipment for the Proposed Project would not be used during every hour of the day. Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3.2-8 would operate up to a total of 8 hours per day, or approximately two-thirds of the period during which construction activities are allowed pursuant to the March JPA Development Code; most pieces of equipment would likely operate for fewer hours per day.

Localized Significance Threshold Analysis

The Proposed Project's potential localized impact was evaluated by comparing the Proposed Project's emissions to the LSTs, as previously noted under the subheadings Construction Localized Significance Threshold and Operational Localized Significance Threshold.

Construction Health Risk Assessment

For the purposes of analyzing health risks, an HRA was prepared to evaluate the potential construction health-risk impacts to sensitive receptors associated with exposure of DPM emissions from construction of the Proposed Project (see Appendix C-1). The analysis was conducted in accordance with the guidelines in the Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (SCAQMD 2003a). The EPA-approved dispersion model, AERMOD, was used to model the impacts of DPM emissions from construction activities. For purposes of this analysis, the Lakes AERMOD View (Version 10.2.1) was used to calculate annual average particulate concentrations associated with site operations. Lakes AERMOD View incorporates EPA's AERMOD Version 21112.⁷

For the construction HRA, on-site construction activity was modeled as an area source encompassing the construction area, and the vendor truck routes were modeled as adjacent volume sources. Vendor trucks were modeled using EPA's haul-route methodology for modeling off-site truck movement. More specifically, the Haul Road Volume Source Calculator in Lakes AERMOD View was used to determine the release height parameters. Based on the EPA methodology, the Proposed Project's modeled sources would result in a release height of 3.49 meters (11.45 feet), an initial lateral dimension of 4 meters (13 feet), and an initial vertical dimension of

⁷ Lakes AERMOD View (Version 10.2.1) and AERMOD (Version 21112) were utilized, because these were the latest available versions at the time the analysis was performed. In Urban Crossroads' professional opinion, the use of the latest versions of Lakes AERMOD View and AERMOD (Versions 11.2.0 and 22112) would not significantly alter the results of the analysis.

3.25 meters (10.66 feet). The construction activity was modeled to represent typical weekday construction activity (Monday through Friday, 8 hours per day, 7:00 a.m. to 3:00 p.m.).

Meteorological data from SCAQMD's Perris Valley monitoring station (SRA 24, Air Quality Station ID 060656001) were used to represent local weather conditions and prevailing winds (SCAQMD 2019b). The construction HRA relied on EPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens, EPA/630/R-003F. Discrete variants for daily breathing rates, exposure frequency, and exposure duration were obtained from relevant distribution profiles presented in the Office of Environmental Health Hazard Assessment's 2015 Guidelines (OEHHA 2015).

Operational Health Risk Assessment

An HRA was prepared to evaluate the potential mobile-source health-risk impacts to sensitive receptors associated with exposure to DPM as a result of diesel trucks serving the Proposed Project, aircraft on runways and taxiways, aircraft approach and departure routes, and operation of aircraft auxiliary power units and ground support equipment (Appendix C-1). The EPA-approved dispersion model, AERMOD, was used to model the impacts of DPM emissions from trucks traveling on study area roadways, consistent with SCAQMD guidance. The analysis was conducted in accordance with the guidelines in the Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (SCAQMD 2003a). For purposes of this analysis, the Lakes AERMOD View (Version 10.2.1) was used to calculate annual average particulate concentrations associated with site operations. Lakes AERMOD View incorporates EPA's AERMOD Version 21112. Meteorological data from the SCAQMD's Perris Valley monitoring station (SRA 24, Air Quality Station ID 060656001) were used to represent local weather conditions and prevailing winds (SCAQMD 2019b). The HRA (Appendix C-1) included DPM emissions from on-site truck idling, on-site truck traveling, and off-site truck traveling. Annual average PM₁₀ emission factors were generated by running EMFAC2021 in EMFAC Mode for vehicles in the Riverside County jurisdiction. Each roadway was modeled as a line source (made up of multiple adjacent volume sources). Aircraft on runways and taxiways were modeled as line area sources with a release height of 12 meters (39 feet) and an initial vertical dimension of 4.1 meters (13.5 feet), based on the FAA's Emissions and Dispersion Modeling System User's Manual (FAA 2013). Additionally, line area sources were utilized to model aircraft as they approach and depart the airport, up to a mixing height of 3,000 feet. Aircraft on approach and departure were assumed to maintain runway heading and a standard glide slope of 3°. Emissions that would occur at the gates, including from auxiliary power units and ground support equipment, were modeled as volume sources for each individual gate.

Discrete variants for daily breathing rates and exposure frequency were obtained from relevant distribution profiles presented in the Office of Environmental Health Hazard Assessment's 2015 Guidelines (OEHHA 2015) and SCAQMD's Rule 1401 risk assessment procedures (SCAQMD 2017b).

CO Hot Spot

An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state 1-hour standard of 20 parts per million (ppm) or the 8-hour standard of 9 ppm were to occur. At the time of publication of the CEQA Air Quality Handbook (SCAQMD 1993), the SCAB was designated nonattainment for CO under the CAAQS and NAAQS (SCAQMD 1993). The determination of a potential CO hot spot is focused on the mobile-source vehicular activity that would occur at intersections in the vicinity of the project site. Aircraft-related emissions are not concentrated enough in a particular location to have the potential to result in a CO hot spot; therefore, aircraft emissions are not considered in determining CO hot spots.

It has long been recognized that CO hot spots are caused by vehicular emissions, primarily when vehicles are idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams per mile for passenger cars (there are requirements for certain other vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment.

To evaluate a potential CO hot spot, the anticipated traffic volumes from the Proposed Project will be compared to the traffic volumes in the CO hot spot analysis prepared for SCAQMD's 2003 AQMP.

Operational Emissions

Operation of the Proposed Project would result in criteria air pollutant emissions through area sources, energy use, mobile sources, on-site cargo handling equipment, and aircraft emissions (on site and off site).

Proposed Project building operations and project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Proposed Project by Southern California Gas and electricity would be supplied by Southern California Edison. The Proposed Project's planned air cargo center land use would not include storage, including cold storage.

Trip characteristics available from the Proposed Project's Traffic Analysis (Appendix M-1) were used in this analysis. The Proposed Project is expected to generate approximately 1,276 one-way vehicular trips per day (638 trips inbound and 638 trips outbound), including 276 one-way truck trips per day (138 truck trips inbound and 138 truck trips outbound), during non-peak operations, and approximately 1,880 one-way vehicular trips per day (940 trips inbound and 940 trips outbound), including 408 one-way truck trips per day (204 truck trips inbound and 204 truck trips outbound), during peak operations.

For passenger car trips (light-duty-auto vehicles, light-duty trucks type 1,⁸ light-duty trucks type 2,⁹ medium-duty trucks, other buses,¹⁰ urban buses,¹¹ motorcycles, school buses, and motor homes), a one-way trip length of 18.85 miles was used based on the Proposed Project's vehicle miles traveled analysis. For heavy-duty trucks (two-axle/light-heavy-duty trucks type 1¹² and type 2¹³, three-axle/medium-heavy-duty trucks, and four-plus-axle/heavy-heavy-duty trucks), the average trip length used for the analysis was obtained from the SCAQMD Rule 2305 - Warehouse Indirect Source Rule - Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program (SCAQMD 2021). SCAQMD's Rule 2305 is based on a 15.3-mile trip length for light-heavy-duty trucks, a 14.2-mile trip length for medium-heavy-duty trucks, and a 39.9-mile trip length for heavy-heavy-duty trucks. As such, a weighted average one-way trip length for trucks of 28.54 and 28.55 miles was utilized for non-peak and peak operations, respectively.

The project-specific passenger car fleet mix used in this analysis is based on a proportional split using the default CalEEMod percentages assigned to light-duty-auto vehicles, light-duty trucks type 1, light-duty trucks type 2, and

⁸ Vehicles in the light-duty trucks type 1 category have a gross vehicle weight rating (GVWR) of less than 6,000 pounds and equivalent test weight of less than or equal to 3,750 pounds.

⁹ Vehicles in the light-duty trucks type 2 category have a GVWR of less than 6,000 pounds and equivalent test weight between 3,751 and 5,750 pounds.

¹⁰ Other buses vehicle classes refer to all other buses except school buses and urban buses.

¹¹ Urban buses vehicle classes consist of natural gas buses, gasoline buses, and diesel buses.

¹² Vehicles in the light-heavy-duty trucks type 1 category have a GVWR of 8,501-10,000 pounds.

¹³ Vehicles in the light-heavy-duty trucks type 2 category have a GVWR of 10,001-14,000 pounds.

medium-duty trucks vehicle types. The truck types (light-heavy-duty trucks, medium-heavy-duty trucks, and heavy-heavy-duty trucks) were broken down consistent with the Proposed Project's Traffic Analysis (Appendix M-1).

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust, inclusive of brake and tire wear particulates. The emissions estimate for travel on paved roads was calculated using CalEEMod.

It is common for cargo buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. For this Proposed Project, on-site modeled operational equipment includes up to one 200-horsepower compressed natural gas or gasoline-powered tractor/loader/backhoe operating 4 hours per day,¹⁴ 365 days per year.

Aircraft-related operational emissions are based on project-specific data and modeled using FAA's AEDT, Version 3C. Aircraft emissions calculations, which include refueling of aircraft, available from the March ARB Commercial Air Cargo Noise and Air Quality Study Final Emissions memo, were used in this analysis (see Appendix 5.5, Aircraft-Related Operational Emissions, in Appendix B-1).

Aircraft characteristics included 10,608 annual operations (5,304 arrivals and 5,304 departures) by the Boeing 767-300 aircraft, as well as AEDT default ground-service equipment and aircraft auxiliary power unit usage. Refueling of aircraft that would use the proposed facilities would occur on site. Aircraft fuel would be trucked from the existing March JPA aircraft fuel farm located off site; emissions associated with the trucked fuel are included in AEDT. Although these hours of operation are not proposed, this analysis assumes that the Proposed Project will operate 24 hours per day, 7 days per week to present a conservative approach.

Other Emissions

Based on available information, the Proposed Project is not anticipated to result in other emissions that have not been addressed under the previous evaluations discussed above. As such, this analysis focuses on the potential for the Proposed Project to generate odors. The potential for the Proposed Project to result in a potential odor impact is based on the Proposed Project's anticipated construction activity and land-use types for operation, and the potential for the Proposed Project to create an odor nuisance pursuant to SCAQMD Rule 402.

3.2.4 Impacts Analysis

Threshold AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Significant and Unavoidable Impact. The project site is located within the SCAB, which is characterized by relatively poor air quality. SCAQMD has jurisdiction over an approximately 10,743-square-mile area consisting of the four-county SCAB and the Los Angeles County and Riverside County portions of what used to be referred to as the Southeast Desert Air Basin. In these areas, SCAQMD is principally responsible for air pollution control and works directly with SCAG, county transportation commissions, local governments,

¹⁴ Based on Table II-3, Port and Rail Cargo Handling Equipment Demographics by Type, from CARB's Technology Assessment: Mobile Cargo Handling Equipment document, a single piece of equipment could operate up to 2 hours per day (Total Average Annual Activity divided by Total Number Pieces of Equipment). As such, the analysis conservatively assumes that the tractor/loader/backhoe would operate up to 4 hours per day.

and federal and state agencies to reduce emissions from stationary, mobile, and indirect sources to meet the CAAQS and NAAQS.

Currently, the CAAQS and NAAQS are exceeded in most parts of the SCAB. In response, SCAQMD has adopted a series of AQMPs to meet the CAAQS and NAAQS. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and minimize any negative fiscal impacts of air pollution control on the economy.

Construction and operation of the development proposed as part of the Proposed Project may result in emissions of short- and long-term criteria air pollutants in conflict with the SCAQMD AQMPs.

SCAQMD has established criteria for determining consistency with an AQMP in Chapter 12, Sections 12.2 and 12.3, of the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993):

- **Consistency Criterion No. 1:** The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The proposed project will not exceed the assumptions in the AQMP or increments based on the year of project build-out phase.

Consistency Criterion No. 1

The violations that Consistency Criterion No. 1 refer to are the CAAQS and NAAQS. CAAQS and NAAQS violations could occur if regional or localized significance thresholds were exceeded.

Construction Impacts

As evaluated, the Proposed Project's localized construction emissions would not exceed the LST threshold (see Threshold AQ-3, Table 3.2-13), and the Proposed Project's construction-source emissions would not exceed applicable regional significance thresholds (see Threshold AQ-2, Table 3.2-9). The Proposed Project's less-than-significant construction-source emissions would be further reduced with implementation of **Mitigation Measure (MM) AQ-1** (Construction Management Plan) and **MM-AQ-2** (Construction Requirements) (see Section 3.2.5, Mitigation Measures, for full text of all air quality mitigation measures). Accordingly, the Proposed Project would be consistent with Consistency Criterion No. 1 during construction.

Operational Impacts

The Proposed Project would not exceed the applicable LSTs for operational activity (see Threshold AQ-3, Table 3.2-14). However, the Proposed Project's operational-source emissions are anticipated to exceed the regional thresholds of significance for VOC, NO_x, and CO emissions (see Threshold AQ-2, Tables 3.2-11 and 3.2-12). Aircraft emissions compose the vast majority of the Proposed Project's emissions and there are no feasible mitigation measures to reduce aircraft emissions because aircraft technology to control emissions has not been developed, although research is ongoing for controlling NO_x and improving fuel efficiencies. Additionally, any potential mitigation measures that would address aircraft emissions would be under the jurisdiction of other agencies, such as FAA or EPA. The Proposed Project would implement **MM-AQ-3** (Improved Energy Efficiency and Water Reduction), **MM-AQ-4** (Truck Requirements), **MM-AQ-5**

(Commute Trip Reduction), and **MM-AQ-6** (Additional Air Quality Tenant Requirements) (see Section 3.2.5), which would reduce the Proposed Project's VOC, NO_x, and CO emissions, but operational-source emissions would continue to exceed the regional thresholds of significance for VOC, NO_x, and CO emissions.

Conclusion – Consistency Criterion 1

On the basis of the preceding discussion, although the Proposed Project's operational emissions would not exceed any of the SCAQMD operational-related LSTs, as shown in Threshold AQ-2, Tables 3.2-11 and 3.2-12, Proposed Project peak and non-peak operational emissions would exceed the SCAQMD's significance thresholds for VOC, NO_x, and CO. VOC and NO_x are precursors for ozone; thus, Project operational activities would contribute a substantial volume of pollutants to the SCAB that could delay the attainment of federal and state ozone standards. The Proposed Project would implement **MM-AQ-3 through MM-AQ-6** to reduce the Proposed Project's operational VOC, NO_x, and CO emissions; however, CalEEMod cannot accurately quantify these reductions and therefore no numeric emissions credit was taken in the analysis. Technologies to reduce aircraft criteria air pollutant emissions have not been fully developed, although research is ongoing; as such, although the majority of the Proposed Project's criteria air pollutant emissions are from aircraft operations, there are no feasible mitigation measures to reduce these emissions. Therefore, the Proposed Project's operational-source emissions would continue to exceed the SCAQMD regional thresholds for these pollutants. As such, the Proposed Project is considered to have the potential to conflict with Consistency Criterion 1.

Consistency Criterion No. 2

The 2022 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the time frames required under federal law. Growth projections from local general plans adopted by jurisdictions in the SCAQMD are provided to SCAG, which develops regional growth forecasts that are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in the March JPA General Plan is considered to be consistent with the AQMP.

Construction Impacts – Consistency Criterion 2

Peak-day emissions generated by construction activities are largely independent of land use assignments but are a function of development scope and maximum area of disturbance. Regardless of the project site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. However, as detailed in response to Threshold AQ-2, construction emissions would be below the regional thresholds. The Proposed Project's construction-source emissions would be further reduced with implementation of **MM-AQ-1** (Construction Management Plan) and **MM-AQ-2** (Construction Requirements). Construction emissions are not relevant to the AQMP assumptions under this criterion.

Operational Impacts – Consistency Criterion 2

The project site is owned by March Inland Port Airport Authority and is designated Aviation under the March JPA General Plan. The primary purpose of the Aviation designation is to provide for the development of uses related to the operation of air cargo and passenger service aircraft such as aircraft maintenance, aircraft hangars, air cargo distribution facilities, and other uses related to airport operations (March JPA 2016).

As previously stated, the Proposed Project includes the development of a gateway air freight cargo center, which consists of construction of a 180,800-square-foot cargo building with 9 at-grade (ground-level) loading doors, 31 truck dock positions, and 37 trailer storage positions. Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day (34 operations per day), 6 days per week (non-peak). During the holiday season (i.e., late November through late December), increased aircraft operations would be anticipated (estimated to result in an additional 128 two-way flights [256 flight operations] over a 4-week period); however, the maximum annual aircraft operations would not exceed the currently available civilian air cargo operations capacity under the Joint Use Agreement.¹⁵

Because the Proposed Project is consistent with the Aviation designation under the March JPA General Plan, it would not exceed the growth projections for the March JPA General Plan utilized in the 2022 AQMP. Therefore, the Project would be consistent with the second criterion.

Conclusion – Consistency Criterion 2

The Project would not exceed the growth projections for the March JPA General Plan utilized in the 2022 AQMP; therefore, the Project would be consistent with the second criterion.

AQMP Consistency Conclusion

The Proposed Project has the potential to result in or cause NAAQS or CAAQS violations. Operational-source emissions would exceed the applicable SCAQMD regional thresholds for VOC, NO_x, and CO. The Proposed Project would implement **MM-AQ-3** through **MM-AQ-6** to reduce the Proposed Project's operational VOC, NO_x, and CO emissions; however, as discussed previously, the emissions would still exceed the thresholds. As such, the Proposed Project is considered to have the potential to conflict with the AQMP and a potentially significant impact would occur with respect to this threshold. The Proposed Project's impacts regarding AQMP consistency would therefore be **significant and unavoidable**.

Threshold AQ-2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Significant and Unavoidable Impact. In developing thresholds of significance for air pollutants, SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The Proposed Project's construction and operational impacts are assessed separately below.

Regional Construction Impacts

CalEEMod calculates maximum daily emissions for summer and winter periods. As such, the estimated maximum daily construction emissions for both summer and winter periods are summarized in Table 3.2-9. The emissions resulting from Proposed Project construction would not exceed criteria pollutant thresholds established by SCAQMD.

¹⁵ The current capacity of annual civilian air cargo operations is approximately 21,000 flight operations.

Table 3.2-9. Maximum Daily Construction Emissions

Year	Activity	Source	Total Construction-Source Emissions (Pounds per Day)					
			VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer								
2024	Site preparation/Demolition	Construction equipment	9.44	90.20	75.60	0.10	11.13	6.92
		Worker, vendor, hauling trips	0.26	1.35	4.52	0.00	0.11	0.03
		<i>Site Preparation Emissions Totals</i>	<i>9.70</i>	<i>91.55</i>	<i>80.12</i>	<i>0.10</i>	<i>11.24</i>	<i>6.95</i>
	Grading	Construction equipment	4.66	45.40	37.40	0.07	4.98	2.96
		Worker, vendor, hauling trips	0.46	16.70	7.54	0.08	1.03	0.51
		<i>Grading Emissions Totals</i>	<i>5.12</i>	<i>62.10</i>	<i>44.94</i>	<i>0.15</i>	<i>6.01</i>	<i>3.47</i>
	Building construction	Construction equipment	2.07	18.3	16.2	0.03	1.14	1.05
		Worker, vendor, hauling trips	0.62	5.47	4.84	0.01	0.34	0.31
		<i>Building Construction Emissions Totals</i>	<i>2.69</i>	<i>23.77</i>	<i>21.04</i>	<i>0.04</i>	<i>1.48</i>	<i>1.36</i>
	Paving	Construction equipment	2.07	18.30	16.20	0.03	1.14	1.05
		Worker, vendor, hauling trips	0.42	1.13	7.03	0.00	0.10	0.02
		<i>Paving Emissions Totals</i>	<i>2.49</i>	<i>19.43</i>	<i>23.23</i>	<i>0.03</i>	<i>1.24</i>	<i>1.07</i>
2025	Building construction	Construction equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, vendor, hauling trips	0.00	0.00	0.00	0.00	0.00	0.00
		<i>Building Construction Emissions Totals</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
	Paving	Construction equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, vendor, hauling trips	0.00	0.00	0.00	0.00	0.00	0.00
		<i>Paving Emissions Totals</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
	Architectural coating	Construction equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, vendor, hauling trips	0.00	0.00	0.00	0.00	0.00	0.00
		<i>Architectural Coating Emissions Totals</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
Winter								
2024	Site preparation/demolition	Construction equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, vendor, hauling trips	0.00	0.00	0.00	0.00	0.00	0.00
		<i>Site Preparation Emissions Totals</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>

Table 3.2-9. Maximum Daily Construction Emissions

Year	Activity	Source	Total Construction-Source Emissions (Pounds per Day)					
			VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	Grading	Construction equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, vendor, hauling trips	0.00	0.00	0.00	0.00	0.00	0.00
	<i>Grading Emissions Totals</i>		<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
	Building construction	Construction equipment	3.85	8.06	10.00	0.01	0.41	0.38
		Worker, vendor, hauling trips	0.08	0.09	1.03	0.00	0.01	0.00
	<i>Building Construction Emissions Totals</i>		<i>3.93</i>	<i>8.15</i>	<i>11.03</i>	<i>0.01</i>	<i>0.42</i>	<i>0.38</i>
	Paving	Construction equipment	2.07	18.30	16.20	0.03	1.14	1.05
		Worker, vendor, hauling trips	0.40	1.23	5.39	0.00	0.10	0.02
	<i>Paving Emissions Totals</i>		<i>2.47</i>	<i>19.53</i>	<i>21.59</i>	<i>0.03</i>	<i>1.24</i>	<i>1.07</i>
	2025	Building construction	Construction equipment	1.93	17.10	16.00	0.03	1.03
Worker, vendor, hauling trips			0.38	1.17	4.95	0.00	0.10	0.02
<i>Building Construction Emissions Totals</i>		<i>2.31</i>	<i>18.27</i>	<i>20.95</i>	<i>0.03</i>	<i>1.13</i>	<i>0.96</i>	
Paving		Construction equipment	3.82	7.81	10.00	0.01	0.39	0.36
		Worker, vendor, hauling trips	0.07	0.09	0.95	0.00	0.01	0.00
<i>Paving Emissions Totals</i>		<i>3.89</i>	<i>7.90</i>	<i>10.95</i>	<i>0.01</i>	<i>0.40</i>	<i>0.36</i>	
Architectural coating		Construction equipment	54.08	1.21	1.53	0.00	0.04	0.04
		Worker, vendor, hauling trips	0.07	0.24	0.99	0.00	0.02	0.00
<i>Architectural Coating Emissions Totals</i>		<i>54.15</i>	<i>1.45</i>	<i>2.52</i>	<i>0.00</i>	<i>0.06</i>	<i>0.04</i>	
Maximum Daily Emissions								
Construction maximum daily emissions (2024)			17.31	91.50	148.29	0.28	18.49	11.49
Construction maximum daily emissions (2025)			60.35	27.62	34.42	0.04	1.59	1.36
<i>SCAQMD Regional Threshold</i>			<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?			No	No	No	No	No	No

Source: Appendix B-1.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

Emissions shown represent a conservative estimate as they assumed a 2023 construction start date and 2024 end date. As noted previously, emissions decline over time because emissions factors for construction decrease as time passes and the analysis year increases due to emissions regulations becoming more stringent.

The Proposed Project’s construction emissions would not exceed the SCAQMD significance thresholds; thus, the Proposed Project’s impacts would be less than significant and would therefore, per SCAQMD criteria, be less than cumulatively significant. To further reduce the Proposed Project’s construction-source NO_x emissions, the Proposed Project would implement **MM-AQ-1**, which would require the Proposed Project to use Tier 4 off-road construction equipment.

As shown in Table 3.2-10, implementation of **MM-AQ-1** would further reduce the Proposed Project’s construction-source emissions of NO_x.

To further reduce the Proposed Project’s construction-source emissions, the Proposed Project would implement **MM-AQ-2** (Construction Requirements); however, the resulting emission reductions are not quantifiable in CalEEMod, and as such, reductions are not reflected in the analysis.

Table 3.2-10. Maximum Daily Construction Emissions - with MM-AQ-1

Year	Activity	Source	Total Construction-Source Emissions (Pounds per Day)					
			VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer								
2024	Site preparation	Construction equipment	1.12	11.04	59.60	0.10	6.91	3.06
		Worker, vendor, hauling trips	0.26	1.35	4.52	0.00	0.11	0.03
		<i>Site Preparation Emissions Totals</i>	<i>1.38</i>	<i>12.39</i>	<i>64.12</i>	<i>0.10</i>	<i>7.02</i>	<i>3.09</i>
	Grading	Construction equipment	0.72	4.87	41.70	0.07	2.99	1.14
		Worker, vendor, hauling trips	0.46	16.70	7.54	0.08	1.03	0.51
		<i>Grading Emissions Totals</i>	<i>1.18</i>	<i>21.57</i>	<i>49.24</i>	<i>0.15</i>	<i>4.02</i>	<i>1.65</i>
	Building construction	Construction equipment	0.37	3.04	17.40	0.03	0.08	0.08
		Worker, vendor, hauling trips	0.42	1.13	7.03	0.01	0.10	0.02
		<i>Building Construction Emissions Totals</i>	<i>0.79</i>	<i>4.17</i>	<i>24.43</i>	<i>0.04</i>	<i>0.18</i>	<i>0.10</i>
	Paving	Construction equipment	0.37	3.04	17.40	0.03	0.08	0.08
		Worker, vendor, hauling trips	0.42	1.13	7.03	0.00	0.10	0.02
		<i>Paving Emissions Totals</i>	<i>0.79</i>	<i>4.17</i>	<i>24.43</i>	<i>0.03</i>	<i>0.18</i>	<i>0.10</i>
2025	Building construction	Construction equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, vendor, hauling trips	0.00	0.00	0.00	0.00	0.00	0.00
		<i>Building Construction Emissions Totals</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
	Paving	Construction equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, vendor, hauling trips	0.00	0.00	0.00	0.00	0.00	0.00
		<i>Paving Emissions Totals</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
	Architectural coating	Construction equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, vendor, hauling trips	0.00	0.00	0.00	0.00	0.00	0.00
		<i>Architectural Coating Emissions Totals</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
Winter								
2024	Site preparation	Construction equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, vendor, hauling trips	0.00	0.00	0.00	0.00	0.91	0.00
		<i>Site Preparation Emissions Totals</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
	Grading	Construction equipment	0.00	0.00	0.00	0.00	0.00	0.00

Table 3.2-10. Maximum Daily Construction Emissions - with MM-AQ-1

Year	Activity	Source	Total Construction-Source Emissions (Pounds per Day)						
			VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	
		Worker, vendor, hauling trips	0.00	0.00	0.00	0.00	0.00	0.00	
		<i>Grading Emissions Totals</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	
	Building construction	Construction equipment	3.13	1.93	10.60	0.01	0.03	0.03	
		Worker, vendor, hauling trips	0.08	0.09	1.03	0.00	0.01	0.00	
		<i>Building Construction Emissions Totals</i>	<i>3.21</i>	<i>2.02</i>	<i>11.63</i>	<i>0.01</i>	<i>0.04</i>	<i>0.03</i>	
	Paving	Construction equipment	0.37	3.04	17.40	0.03	0.08	0.08	
		Worker, vendor, hauling trips	0.40	1.23	5.39	0.00	0.10	0.02	
		<i>Paving Emissions Totals</i>	<i>0.77</i>	<i>4.27</i>	<i>22.79</i>	<i>0.03</i>	<i>0.18</i>	<i>0.10</i>	
	2025	Building construction	Construction equipment	0.37	3.03	17.40	0.03	0.08	0.08
			Worker, vendor, hauling trips	0.38	1.17	4.95	0.00	0.10	0.02
		<i>Building Construction Emissions Totals</i>	<i>0.75</i>	<i>4.20</i>	<i>22.35</i>	<i>0.03</i>	<i>0.18</i>	<i>0.10</i>	
Paving		Construction equipment	3.13	1.93	10.60	0.01	0.03	0.03	
		Worker, vendor, hauling trips	0.07	0.09	0.95	0.00	0.01	0.00	
		<i>Paving Emissions Totals</i>	<i>3.20</i>	<i>2.02</i>	<i>11.55</i>	<i>0.01</i>	<i>0.04</i>	<i>0.03</i>	
Architectural coating		Construction equipment	53.93	0.86	1.28	0.00	0.00	0.00	
	Worker, vendor, hauling trips	0.07	0.24	0.99	0.00	0.02	0.00		
	<i>Architectural Coating Emissions Totals</i>	<i>54.00</i>	<i>1.10</i>	<i>2.27</i>	<i>0.00</i>	<i>0.02</i>	<i>0.00</i>		
Maximum Daily Emissions									
Construction maximum daily emissions (2024)			3.98	38.13	137.79	0.28	11.22	4.84	
Construction maximum daily emissions (2025)			57.95	7.32	36.17	0.04	0.24	0.13	
<i>SCAQMD Regional Threshold</i>			<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>	
Threshold Exceeded?			No	No	No	No	No	No	

Source: Appendix B-1.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

Emissions shown represent a conservative estimate as they assumed a 2023 construction start date and 2024 end date. As noted previously, emissions decline over time because emissions factors for construction decrease as time passes and the analysis year increases due to emissions regulations becoming more stringent.

Regional Operational Impacts

Operational activities associated with the Proposed Project would result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Operational emissions would be expected from the following primary sources:

- Area source emissions
- Energy source emissions
- Mobile source emissions
- On-site cargo handling equipment emissions
- Aircraft emissions (on site and localized off site)

Non-Peak Season

Consistent with the Traffic Analysis (Appendix M-1), both non-peak and peak seasons have been evaluated. CalEEMod uses summer and winter EMFAC2021 emission factors to derive vehicle emissions associated with operational activities, which vary by season. As such, non-peak operational activities are presented in Table 3.2-11. Detailed operational model outputs are presented in Appendix B-1. As shown in Table 3.2-11, without the inclusion of aircraft emissions, emissions of all criteria air pollutants of concern except for NO_x would be less than significant. The mobile sources associated with the Proposed Project (trucks and employees) would still result in an exceedance of the NO_x significance threshold. The aircraft emissions comprise approximately 87% of the VOC emissions, 90% of NO_x emissions, and 78% of CO emissions. Aircraft emissions are the primary source of the significant air quality impact under the Non-Peak Season scenario.

Table 3.2-11. Summary of Proposed Project Operational Emissions - Non-Peak Season (48 Weeks)

Source	Emissions (Pounds per Day)					
	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Mobile source	11.75	59.70	161.00	0.79	19.60	4.49
Area source	12.22	0.14	15.72	0.00	0.02	0.02
Energy source	0.10	1.86	1.56	0.02	0.14	0.14
On-site equipment source	0.23	0.75	32.89	0.00	0.06	0.05
Aircraft source	161.12	556.64	731.60	41.48	5.78	5.76
Total Maximum Daily Emissions	185.42	619.09	942.77	42.29	25.60	10.46
<i>SCAQMD Regional Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	Yes	Yes	Yes	No	No	No

Source: Appendix B-1.

Notes: VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

Non-peak values are based on summer emissions estimates.

Operational emissions were modeled based on an opening year of 2024 and would decrease with a later opening year. See Meridian D-1 Gateway Aviation Center Opening Year Emissions Comparison Memorandum, Appendix B-2.

Peak Season

The peak operational activities are presented in Table 3.2-12. Detailed operational model outputs are presented in Appendix B-1. Similar to the Non-Peak Season, without the inclusion of aircraft emissions all criteria air pollutants of concern, except for NO_x, would be less than significant. The mobile sources (trucks and employees) associated with the Proposed Project would still result in an exceedance of the NO_x significance threshold. The aircraft emissions comprise approximately 90% of the VOC emissions, 90% of NO_x emissions, and 82% of CO emissions. Aircraft emissions are the primary source of the significant air quality impact under the Peak Season scenario.

Table 3.2-12. Summary of Proposed Project Operational Emissions - Peak Season (4 Weeks - Winter)

Source	Emissions (Pounds per Day)					
	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Mobile source	11.22	62.80	132.80	0.76	19.60	4.49
Area source ^a	9.64	0.00	0.00	0.00	0.00	0.00
Energy source	0.10	1.86	1.56	0.02	0.14	0.14
On-site equipment source	0.23	0.75	32.89	0.00	0.06	0.05
Aircraft source	194.34	617.00	811.02	0.00	6.44	6.38
Total Maximum Daily Emissions	215.53	682.42	978.27	0.78	26.24	11.06
<i>SCAQMD Regional Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	Yes	Yes	Yes	No	No	No

Source: Appendix B-1.

Notes: VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

Peak values are based on winter emissions estimates.

Operational emissions were modeled based on an opening year of 2024 and would decrease with a later opening year. See Meridian D-1 Gateway Aviation Center Opening Year Emissions Comparison Memorandum, Appendix B-2.

^a Based on CalEEMod defaults, it is assumed that landscape maintenance equipment would not be used in the winter. It should be noted that the Proposed Project would use hardscape landscaping, and the use of landscaping equipment would likely be minimal.

As shown in Tables 3.2-11 and 3.2-12, the Proposed Project’s daily regional emissions from ongoing non-peak and peak operations would exceed the SCAQMD thresholds of significance for emissions of VOCs, NO_x, and CO. Therefore, a potentially significant impact would occur and would, per SCAQMD criteria, be potentially cumulatively significant. Aircraft emissions account for the vast majority of the VOC (90%), NO_x (90%), and CO (82%) emissions; however, there is no feasible mitigation to reduce these emissions because aircraft technology to control emissions has not been developed, although research is ongoing for controlling VOC, NO_x, and CO emissions and improving fuel efficiencies. Additionally, the March JPA does not have regulatory authority over aircraft emissions; FAA and EPA are the regulatory authorities. Implementation of **MM-AQ-3** (Improved Energy Efficiency and Water Reduction), **MM-AQ-4** (Truck Requirements), **MM-AQ-5** (Commute Trip Reduction), and **MM-AQ-6** (Additional Air Quality Tenant Requirements) would reduce the Proposed Project’s operational VOC, NO_x, and CO emissions. However, CalEEMod cannot accurately quantify these reductions, and therefore no numeric emissions credit has been taken in the analysis. As such, even with application of **MM-AQ-3 through MM-AQ-6**, the Proposed Project’s operational-source emissions impacts would be **significant and unavoidable**.

Threshold AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Less-Than-Significant Impact with Mitigation Incorporated. The potential impact of Proposed Project-generated air pollutant emissions on sensitive receptors has been considered. Sensitive receptors can include uses such as long-term healthcare facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, childcare centers, and athletic facilities can also be considered sensitive receptors.

Localized Significance Thresholds Analysis

The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of a project as a result of construction and operation activities. Such an evaluation is referred to as an LST analysis. LSTs apply to CO, NO_x, PM₁₀, and PM_{2.5}.

Construction Localized Significance Threshold Impacts

As shown in Table 3.2-13, the on-site construction emissions for NO_x, CO, PM₁₀, and PM_{2.5}, with and without implementation of **MM-AQ-1**, were compared to the respective LSTs, as previously shown in Table 3.2-5.¹⁶ Outputs from the model runs for construction LSTs are provided in Appendix B-1. To further reduce the Proposed Project’s construction-source emissions, the Proposed Project would include implementation of **MM-AQ-2** (Construction Requirements); however, the resulting emission reductions are not quantifiable in CalEEMod, and as such, reductions are not reflected in the analysis.

Results of the construction LST analysis indicate that the Proposed Project would not exceed the SCAQMD LSTs during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Proposed Project construction, and impacts would be **less than significant with mitigation incorporated**.

Table 3.2-13. Localized Significance Threshold Summary of Construction

On-Site Emissions	Emissions (Pounds per Day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Site Preparation				
Maximum Daily Emissions	90.20	75.60	11.13	6.92
Maximum Daily Emissions - with MM-AQ-1	11.04	59.60	6.91	3.06
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	No	No	No	No
Grading				
Maximum Daily Emissions	45.40	37.40	4.98	2.96
Maximum Daily Emissions - with MM-AQ-1	4.87	41.70	2.99	1.14
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	No	No	No	No
Building Construction				
Maximum Daily Emissions	53.70	48.40	3.31	3.01
Maximum Daily Emissions - with MM-AQ-1	9.11	52.20	0.24	0.24
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	No	No	No	No
Paving				
Maximum Daily Emissions	15.87	20.00	0.80	0.74
Maximum Daily Emissions - with MM-AQ-1	3.86	21.20	0.06	0.06
SCAQMD Localized Threshold	314	2,379	207	105

¹⁶ According to the Final SCAQMD LST Methodology, “off-site mobile emissions from the project should not be included in the emissions compared to the LSTs” (SCAQMD 2008).

Table 3.2-13. Localized Significance Threshold Summary of Construction

On-Site Emissions	Emissions (Pounds per Day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Threshold Exceeded?	No	No	No	No
Architectural Coating				
Maximum Daily Emissions	1.21	1.53	0.04	0.04
Maximum Daily Emissions - with MM-AQ-1	0.86	1.28	0.00	0.00
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	No	No	No	No

Source: Appendix B-1.

Notes: NO_x = oxides of nitrogen; CO = carbon monoxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

Emissions shown represent a conservative estimate as they assumed a 2023 construction start date and 2024 end date. As noted previously, emissions decline over time because emissions factors for construction decrease as time passes and the analysis year increases due to emissions regulations becoming more stringent.

Operational LST Impacts

The LST analysis includes on-site sources (area, energy, mobile, on-site cargo handling equipment, and aircraft emissions). However, the CalEEMod outputs do not separate on-site and off-site emissions from mobile sources. As such, to establish a maximum potential impact scenario for analytic purposes, the emissions shown in Table 3.2-14 represent all on-site project-related stationary (area) sources and project-related mobile sources. It was assumed that the maximum distance a passenger car and/or truck would go through the project site is approximately 0.20 miles. As such, an on-site travel distance of approximately 0.20 miles for each passenger car trip (1.2% of passenger car mobile-source emissions) and truck trip (2.41% of truck mobile-source emissions) was used as a conservative measure. Modeling based on these assumptions demonstrates that even within broad encompassing parameters, Proposed Project operational-source emissions would not exceed applicable LSTs (as shown in Table 3.2-14). Implementation of **MM-AQ-3** (Improved Energy Efficiency and Water Reduction), **MM-AQ-4** (Truck Requirements), **MM-AQ-5** (Commute Trip Reduction), and **MM-AQ-6** (Additional Air Quality Tenant Requirements) would reduce the Proposed Project’s operational VOC, NO_x, and CO emissions. However, CalEEMod cannot accurately quantify these reductions; therefore, no numeric emissions credit has been taken in the analysis.

Table 3.2-14. Localized Significance Threshold Summary of Operations

Operational Activity	Emissions (Pounds per Day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Non-Peak Season (48 weeks)				
Maximum Daily Emissions	11.35	71.54	0.44	0.27
SCAQMD Localized Threshold	314	2,379	50	26
Threshold Exceeded?	NO	NO	NO	NO
Peak Season (4 weeks)				
Maximum Daily Emissions	11.66	58.47	0.42	0.25
SCAQMD Localized Threshold	314	2,379	50	26

Table 3.2-14. Localized Significance Threshold Summary of Operations

Operational Activity	Emissions (Pounds per Day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Threshold Exceeded?	NO	NO	NO	NO

Source: Appendix B-1.

Notes: NO_x = oxides of nitrogen; CO = carbon monoxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

Operational emissions were modeled based on an opening year of 2024 and would decrease with a later opening year. See Meridian D-1 Gateway Aviation Center Opening Year Emissions Comparison Memorandum, Appendix B-2.

Results of the LST analysis indicate that the Proposed Project would not exceed the SCAQMD localized significance thresholds during operational activities; impacts would be **less than significant with mitigation incorporated**.

CO Hot Spot Analysis

An adverse CO concentration, known as a “hot spot,” would occur if an exceedance of the state 1-hour standard of 20 ppm or the 8-hour standard of 9 ppm were to occur. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when vehicles are idling at congested intersections. Aircraft-related emissions are not concentrated enough in a particular location to have the potential to result in a CO hot spot; therefore, aircraft emissions are not considered in determining CO hot spots. This assessment is focused on the on-road mobile sources the Proposed Project would generate.

To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO hot spot analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods (SCAQMD 2003b). This hot spot analysis did not predict any violation of CO standards, as shown in Table 3.2-15.

Table 3.2-15. Carbon Monoxide Model Results

Intersection Location	Carbon Monoxide Concentrations (Parts per Million)		
	Morning 1-Hour	Afternoon 1-Hour	8-Hour
Wilshire Boulevard/Veteran Avenue	4.6	3.5	3.7
Sunset Boulevard/Highland Avenue	4	4.5	3.5
La Cienega Boulevard/Century Boulevard	3.7	3.1	5.2
Long Beach Boulevard/Imperial Highway	3	3.1	8.4

Source: SCAQMD 2003b, Appendix V: Modeling and Attainment Demonstrations.

Note: Federal 1-hour standard is 35 ppm and the deferral 8-hour standard is 9 ppm.

Based on the SCAQMD’s 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide, peak CO concentrations in the SCAB were a result of unusual meteorological and topographical conditions, and not a result of traffic volumes or congestion at a particular intersection (Appendix B-1). As evidence of this, for example, of the 8.4 ppm 8-hour CO concentration measured at the Long Beach Boulevard and Imperial Highway intersection (highest CO-generating intersection within the hot spot analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.4 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared. In contrast, an adverse CO

concentration, known as a hot spot, would occur if an exceedance of the 1-hour CAAQS of 20 ppm or the 8-hour CAAQS of 9 ppm were to occur.

The ambient 1-hour and 8-hour CO concentration within the Proposed Project study area were estimated to be 1.9 ppm and 1.4 ppm, respectively (data from Perris Valley monitoring station for 2020) (SCAQMD 2020). Therefore, even if the traffic volumes for the Proposed Project were double or even triple the traffic volumes generated at the Long Beach Boulevard and Imperial Highway intersection, coupled with the ongoing improvements in ambient air quality, the Proposed Project would not be capable of resulting in a CO hot spot at any study area intersections.

For purposes of analysis, the 2003 AQMP was relied on to determine whether the Proposed Project would generate a CO hot spot. The 2003 AQMP, as previously shown in Table 3.2-15, estimated that the 1-hour concentration for the Wilshire Boulevard and Veteran Avenue intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations ($4.6 \text{ ppm} \times 4 = 18.4 \text{ ppm}$) would still not exceed the most stringent 1-hour CO standard (20.0 ppm). As shown in the Traffic Analysis on Table 6-2, Opening Year Cumulative (2024) with Proposed Project (Non-Peak) Traffic Volumes, the highest number of trips on a segment of road is 54,548 vehicles per hour on Heacock Street and Cactus Avenue (Appendix M-1) As shown in the Traffic Analysis in Table 6-3, Opening Year Cumulative (2024) with Proposed Project (Peak) Traffic Volumes, the highest number of trips on a segment of road is 54,642 vehicles per hour on Heacock Street and Cactus Avenue (Appendix M-1).

Proposed Project traffic would not create or result in a CO hot spot. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Proposed Project operations, and impacts would be **less than significant**.

Health Risk Assessment

Construction Health Risk Assessment

Residential Exposure Scenario

The land use with the greatest potential exposure to Proposed Project's construction-source TAC emissions is an existing residence located at 1221 West Oleander Avenue, which is located approximately 5,612 feet southwest of the project site (see Figure 3.2-1). Although this residence is not the nearest residential receptor, due to prevailing winds in the vicinity of the project site and the location of sources, it is the location that would experience the highest concentrations of DPM during construction. Because there are no private outdoor living areas (e.g., backyards) facing the project site, the receptor at this residence is placed at the building façade facing the project site.

The Proposed Project's construction-source TAC emissions are estimated at 0.14 in one million without mitigation and 0.08 in one million with **MM-AQ-1**, both of which are less than the SCAQMD's significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01 with or without mitigation, which would not exceed the applicable threshold of 1.0. As such, the Proposed Project would not cause a significant human health or cancer risk to adjacent land uses as a result of project construction activity; the impact would be **less than significant**. All other residential receptors during construction activity would experience less risk than what is identified for this location.

Worker Exposure Scenario

The worker receptor land use with the greatest potential exposure to Proposed Project's construction-source DPM emissions is the KRIV-Amazon warehouse located approximately 198 feet south of the project site at 17101 Heacock Street, which represents the adjacent potential worker receptor (see Figure 3.2-1). At the maximally exposed individual worker receptor, the maximum incremental cancer risk attributable to Proposed Project construction is 0.05 in one million without mitigation and <0.01 in one million with **MM-AQ-1**, both of which are less than SCAQMD's threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be <0.01 with or without mitigation, which would not exceed the applicable significance threshold of 1.0. Because all other modeled worker receptors are located at a greater distance than the maximally exposed individual worker receptor analyzed herein, and because DPM dissipates with distance from the source, all other worker receptors in the vicinity of the project site would be exposed to less emissions during construction and therefore less risk than the maximally exposed individual worker receptor identified herein. As such, the Proposed Project would have a **less-than-significant impact** on human health or cancer risk to adjacent workers.

Schoolchild Exposure Scenario

There are no schools located within 0.25 miles of the project site. As such, there would be no significant impacts that would occur to any schools in the vicinity of the project site. Proximity to sources of TACs is critical to determining the impact. In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70% drop-off in particulate pollution levels at 500 feet. Based on CARB and SCAQMD emissions and modeling analyses, an 80% drop-off in pollutant concentrations is expected at approximately 1,000 feet from a distribution center. As such, the Proposed Project would not cause a significant human health or cancer risk to nearby schoolchildren. Nevertheless, Rainbow Ridge Elementary School and March Middle School were considered in this analysis. The impact would be **less than significant**.

Rainbow Ridge Elementary School Child Exposure Scenario

The results of the analysis indicate that at Rainbow Ridge Elementary School, located approximately 4,080 feet northeast of the project site, the maximum incremental cancer risk attributable to Proposed Project's construction is estimated at 0.01 in one million without mitigation and <0.01 in one million with **MM-AQ-1**, both of which are less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01 with or without mitigation, which would not exceed the applicable threshold of 1.0. The impact would be **less than significant**.

March Middle School Child Exposure Scenario

The results of the analysis indicate that at March Middle School, located approximately 4,652 feet northeast of the project site, the maximum incremental cancer risk attributable to the Proposed Project's construction is estimated at 0.01 in one million without mitigation and <0.01 in one million with **MM-AQ-1**, both of which are less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01 with or without mitigation, which would not exceed the applicable threshold of 1.0. The impact would be **less than significant**.

Summary

The results of the HRA indicate that the Proposed Project would not result in any significant health risk impacts from exposure to TACs from Proposed Project construction (Appendix C-1). Thus, impacts to sensitive receptors would be **less than significant**

Operational Health Risk Assessment

The operational HRA prepared for the Proposed Project accounted for the sources of TACs from the Project including diesel-fueled trucks and aircraft. Truck DPM emissions were calculated using emission factors for PM₁₀ generated with EMFAC2021, developed by CARB. Aircraft emissions were estimated based on Project-specific data and modeled using FAA's AEDT Version 3C. Aircraft emissions calculations, which include refueling of aircraft, available from the March ARB Commercial Air Cargo Noise and Air Quality Study Final Emissions memo (Appendix 5.5 to Appendix B-1), were utilized in this analysis.

Residential Exposure Scenario

The residential land use with the greatest potential exposure to Proposed Project's operational-source TAC emissions is an existing residence located at 1221 West Oleander Avenue, which is located approximately 5,612 feet southwest of the project site (see Figure 3.2-1). Although this residence is not the nearest residential receptor, due to prevailing winds in the vicinity of the project site and the location of sources, it is the location that would experience the highest concentrations of TACs during the operational phase of the Proposed Project. Because there are no private outdoor living areas (e.g., backyards) facing the project site, the receptor at this residence is placed at the building façade facing the project site. At the maximally exposed individual receptor, the maximum incremental cancer risk attributable to Proposed Project's operational-source TAC emissions is estimated at 3.27 in one million, which is less than SCAQMD's significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be 0.05, which would not exceed the applicable significance threshold of 1.0. Because all other modeled residential receptors are exposed to lesser concentrations and are located at a greater distance from the project site than the maximally exposed individual receptor analyzed herein, and because TACs generally dissipate with distance from the source, all other residential receptors in the vicinity of the project site would be exposed to less emissions and therefore less risk than the maximally exposed individual receptor identified herein. As such, the Proposed Project would not cause a significant human health or cancer risk to nearby residences. The impact would be **less than significant**.

Worker Exposure Scenario

The worker receptor land use with the greatest potential exposure to Proposed Project's operational-source TAC emissions is the KRIV-Amazon warehouse located at 17101 Heacock Street, which represents the potential worker receptor approximately 198 feet south of the project site (see Figure 3.2-1).¹⁷ At the maximally exposed individual worker receptor, the maximum incremental cancer risk impact is 1.25 in one million, which is less than SCAQMD's threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be 0.15, which would not exceed the applicable significance threshold of 1.0.

¹⁷ SCAQMD guidance does not require assessment of the potential health risk to on-site workers. Excerpts from the Air Toxics Hot Spots Program Risk Assessment Guidelines (OEHHA 2015) also indicate that it is not necessary to examine the health effects to on-site workers unless required by Resource Conservation and Recovery Act (RCRA)/Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or the workers reside on site.

Because all other modeled worker receptors are located at a greater distance than the maximally exposed individual worker receptor analyzed herein, and because TACs dissipate with distance from the source, all other worker receptors in the vicinity of the project site would be exposed to less emissions and therefore less risk than the maximally exposed individual worker receptor identified herein. As such, the Proposed Project would not cause a significant human health or cancer risk to adjacent workers. The impact would be **less than significant**.

Schoolchild Exposure Scenario

There are no schools located within 0.25 miles of the project site. As such, there would be no significant impacts that would occur to any schools in the vicinity of the project site. Proximity to sources of TACs is critical to determining the impact. In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70% drop-off in particulate pollution levels at 500 feet. Based on CARB and SCAQMD emissions and modeling analyses, an 80% drop-off in pollutant concentrations is expected at approximately 1,000 feet from a distribution center. As such, the Proposed Project would not cause a significant human health or cancer risk to nearby schoolchildren. Nevertheless, Rainbow Ridge Elementary School and March Middle School were considered in this analysis. The impact would be **less than significant**.

Rainbow Ridge Elementary School Child Exposure Scenario

The results of the analysis indicate that at Rainbow Ridge Elementary School, located approximately 4,080 feet northeast of the project site, the maximum incremental cancer risk attributable to the Proposed Project's operational emissions is estimated at 0.79 in one million, which is less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be 0.03, which would not exceed the applicable threshold of 1.0. The impact would be **less than significant**.

March Middle School Child Exposure Scenario

The results of the analysis indicate that at March Middle School, located approximately 4,652 feet northeast of the project site, the maximum incremental cancer risk attributable to the Proposed Project's operational emissions is estimated at 0.74 in one million, which is less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be 0.03, which would not exceed the applicable threshold of 1.0. The impact would be **less than significant**.

Construction and Operational Impacts

Table 3.2-16 summarizes the Proposed Project's combined construction and operational cancer risks. The land use with the greatest potential increased cancer risk due to exposure to the Proposed Project's construction-source and operational-source TAC emissions is an existing residence located at 1221 West Oleander Avenue, which is located approximately 5,612 feet southwest of the project site. At this location, the maximum incremental cancer risk attributable to Proposed Project's construction and operational TAC source emissions is estimated at 3.41 in a million without mitigation and 3.35 in one million with **MM-AQ-1**, both of which are less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be 0.05 with or without mitigation, which would not exceed the applicable threshold of 1.0. As such, the Proposed Project would not cause a significant human health or cancer risk to adjacent land uses

as a result of construction and operational activity. All other receptors would experience less risk during construction and operational activity than what is identified for this location. The impact would be **less than significant**.

Table 3.2-16. Summary of Combined Construction and Operational Cancer and Non-Cancer Risks - Lifetime Cancer Risk

Time Period	Location	Maximum Lifetime Cancer Risk (Risk per Million) without Mitigation	Maximum Lifetime Cancer Risk (Risk per Million) with Mitigation	Significance Threshold (Risk per Million)	Exceeds Significance Threshold?
30-year exposure	Maximum exposed sensitive receptor	3.41	3.35	10	No
25-year exposure	Maximum exposed worker receptor	1.30	1.26	10	No
9-year exposure	Maximum exposed individual schoolchild (Rainbow Ridge Elementary School)	0.80	0.79	10	No
9-year exposure	Maximum exposed individual schoolchild (March Middle School)	0.75	0.74	10	No

Health Effects of Criteria Air Pollutants

NO_x and VOCs are precursor emissions that form O₃ in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so O₃ may be formed at a distance downwind from the sources. Breathing ground-level O₃ can result in health effects including reduced lung function; inflammation of airways; throat irritation; pain, burning, or discomfort in the chest when taking a deep breath; chest tightness; wheezing; or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily O₃ concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects on asthmatics suggests that O₃ can make asthma symptoms worse and can increase sensitivity to asthma triggers.

As explained in the Brief of Amicus Curiae by SCAQMD (Brief; April 6, 2015) in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (*Friant Ranch*) (Appendix C-2), SCAQMD has some of the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the state, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes. The Brief discusses that it may be infeasible to quantify health risks caused by individual projects, due to various factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residential). The Brief also cites the author of the CARB methodology, which reported that a PM_{2.5} methodology is not suited for small projects and may yield

unreliable results. Similarly, SCAQMD staff does not currently know of a way to accurately quantify O₃-related health impacts caused by NO_x or VOC emissions from relatively small projects, due to photochemistry and regional model limitations. The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful.

As noted in the Brief, it would be extremely difficult, if not impossible, to quantify health impacts of criteria pollutants for various reasons, including modeling limitations and where in the atmosphere air pollutants interact and form, for a development as small as the proposed project. Furthermore, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD; April 13, 2015) in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (*Friant Ranch*), SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts. SJVAPCD notes, "the Air District is simply not equipped to analyze and to what extent the criteria pollutant emissions of an individual CEQA project directly impact human health in a particular area ... even for projects with relatively high levels of emissions of criteria pollutant precursor emissions."

These briefs make it clear that two expert agencies do not believe that there must be a quantification of a project's health risks in all CEQA documents prepared for individual projects. To date, SCAQMD has not released any additional guidance on the *Friant Ranch* analysis. Further, there are no established methods to apply the *Friant Ranch* analysis to aircraft operations. Any attempt to quantify the Proposed Project's health risks would be considered unreliable and misleading. Lastly, as demonstrated in the construction and operational LST (NO₂, CO, PM₁₀, and PM_{2.5}) analyses and the CO hot spot assessment, the Proposed Project is not anticipated to result in localized criteria pollutant impacts; therefore, no associated health effects are anticipated to result. Therefore, **less-than-significant** impacts would occur.

Threshold AQ-4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less-Than-Significant Impact. Based on available information, the Proposed Project is not anticipated to result in other emissions that have not been addressed under Thresholds AQ-1 through AQ-3. As such, this analysis focuses on the potential for the Proposed Project to generate odors. The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints. Land uses generally associated with odor complaints include the following:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills

- Dairies
- Fiberglass molding facilities

The Proposed Project would not contain land uses typically associated with emitting objectionable odors. The Proposed Project would not include any uses identified by SCAQMD as being associated with emitting objectionable odors. Because the Proposed Project's operational activities would not include these sources of odors, potential operational odor impacts would be **less than significant**.

Potential odor sources associated with construction of the Proposed Project may result from construction equipment exhaust, the application of asphalt and architectural coatings during construction activities, and the temporary storage of typical solid waste (refuse) associated with the Proposed Project's long-term operational uses. Standard construction requirements (i.e., use of SCAQMD-compliant architectural coatings and paving materials) would minimize any potential odor impacts from construction to a level of **less than significant**.

Additionally, construction odor emissions would be temporary, short term, and intermittent, and would cease upon completion of the respective phase of construction. It is expected that refuse generated by construction and operation of the Proposed Project would be stored in covered containers and removed at regular intervals. The Proposed Project would be required to comply with SCAQMD Rule 402, Nuisance, to prevent occurrences of public nuisances, which prohibits the discharge of air pollutants from a facility that could cause injury, detriment, nuisance, or annoyance to the public or damage business or property. Therefore, odors associated with Proposed Project construction and operations would be **less than significant**.

3.2.5 Mitigation Measures

The following mitigation measures have been evaluated for feasibility and would be implemented for the Proposed Project to reduce potentially significant operational VOC, NO_x, and CO emission impacts:

MM-AQ-1 Construction Management Plan. Prior to the issuance of a grading permit, the applicant shall prepare and submit to the March Joint Powers Authority (JPA) for approval a Construction Management Plan to ensure that off-road diesel construction equipment rated at 50 horsepower or greater complies with U.S. Environmental Protection Agency/California Air Resources Board Tier 4 off-road emissions standards or equivalent and that all construction equipment is tuned and maintained in accordance with the manufacturer's specifications. All equipment maintenance records and data sheets, including design specifications and emission control tier classifications, shall be kept on site and furnished to March JPA or other regulators upon request.

MM-AQ-2 Construction Requirements. Prior to issuance of a grading permit and/or building permit, the applicant shall provide evidence to March Joint Powers Authority (JPA) that the subject plans contain the following requirements and restrictions:

- A. No grading shall occur on days with an Air Quality Index forecast greater than 150 for particulates or ozone as forecasted for the project area (Source Receptor Area 24).
- B. Active ground disturbance shall not exceed 20 acres per day.

- C. Contractor shall require all heavy-duty trucks hauling onto the project site to be model year 2014 or later. This measure shall not apply to trucks that are not owned or operated by the contractor since it would be infeasible to prohibit access to the site by any truck that is otherwise legal to operate on California roads and highways.
- D. No construction equipment idling longer than 3 minutes shall be permitted. No off-road diesel-powered equipment shall be in the “on” position for more than 8 hours per day.
- E. No diesel-powered portable generators shall be used, unless necessary due to emergency situations or constrained supply.
- F. Contractor required to provide transit and ridesharing information to on-site construction workers.
- G. Contractor required to establish location for food or catering truck service to construction workers and to cooperate with food service providers to provide consistent food service.
- H. Use of electric-powered hand tools, forklifts, and pressure washers, to the extent feasible.
- I. Designation of an area in the construction site where electric-powered construction vehicles and equipment can charge.
- J. Project will utilize “Super-Compliant” low volatile organic compound (VOC) paints that have been reformulated to exceed the regulatory VOC limits put forth in the South Coast Air Quality Management District’s Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the applicant may utilize tilt-up concrete buildings that do not require the use of architectural coatings.

MM-AQ-3 Improved Energy Efficiency and Water Reduction.

- A. **Building Design** – Prior to issuance of a building permit, March Joint Powers Authority (JPA) shall confirm that building plans include the following:
 - i. Building constructed to achieve 2023 Leadership in Energy and Environmental Design (LEED) Silver certification standards or equivalent, at a minimum.
 - ii. Energy Star-certified light bulbs and light fixtures.
 - iii. Duct insulation to a minimum level (R-6) of and modestly enhanced window insulation (0.28 or less U-factor, 0.22 or less solar heat-gain coefficient [SHGC]).
 - iv. A modest cool roof, defined as Cool Roof Rating Council Rated 0.15 aged solar reflectance and 0.75 thermal emittance.
 - v. Heating, ventilation, and air conditioning equipment with a season energy efficiency ratio of 14 or higher and energy efficiency ratio [EER] 14/78% annual fuel utilization efficiency [AFUE] or 8 heating seasonal performance factor [HSPF].
 - vi. Water heaters with an energy factor of 0.92 or higher.
 - vii. All occupied rooms shall have some form of daylighting (e.g., skylights or windows).
 - viii. At least 50% of artificial lighting unit fixtures shall be high efficacy.
 - ix. Waterless urinals and high efficiency toilets.
 - x. Water-efficient faucets (1.28 gpm).
 - xi. Blower door home energy rating system (HERS) verified envelope leakage or equivalent.
 - xii. Enhanced insulation (rigid wall insulation R-13 or equivalent, roof/attic R-38).

- xiii. Cool surface treatments on all drive aisles and parking areas or with a solar-reflective cool pavement such as concrete subject to Airport Land Use Commission (ALUC) approval.
- B. Landscape Design** – Prior to issuance of a building permit, March JPA shall confirm building and landscaping plans include the following:
- i. Electrical outlets to each of the areas in the vicinity of the building that are to be landscaped so that electrical equipment shall be used for landscape maintenance. This measure may also be satisfied by locating charging stations around the building to accommodate battery-operated equipment.
 - ii. Landscape non-potable water system shall meet “purple” pipe standards.
 - iii. Water efficient landscaping having no turf and only drought-tolerant plants and including additional water-efficient irrigation controls such as smart irrigation controllers.
- C. Tenant Agreement Requirements** – Prior to issuance of a certificate of occupancy, March JPA shall confirm any tenant agreement includes the following:
- i. Require the use of electric or battery-operated equipment for landscape maintenance.
 - ii. Require the use of electric service yard trucks (hostlers), pallet jacks and forklifts, and other on-site equipment, with necessary electrical charging stations provided. Yard hostlers may be diesel fueled in lieu of electrically powered, provided that the occupant submits a letter identifying that electric hostlers are technically infeasible and provided such yard hostlers are compliant with California Air Resources Board (CARB) Tier 4 Final compliant for off-road vehicles. As an alternative, hydrogen fuel-cell or compressed natural gas (CNG) powered equipment shall also be acceptable.
 - iii. Require provision of the following information annually to employees and truck drivers as appropriate:
 - a. Building energy efficiency, solid waste reduction, recycling, and water conservation.
 - b. Vehicle greenhouse gas (GHG) emissions, electric vehicle charging availability, and alternate transportation opportunities for commuting.
 - c. Participation in the Voluntary Interindustry Commerce Solutions (VICS) “Empty Miles” program to improve goods trucking efficiencies.
 - d. Health effects of diesel particulates, state regulations limiting truck idling time, and the benefits of minimized idling.
 - e. The importance of minimizing traffic, noise, and air pollutant impacts to any residences in the Project vicinity.
 - f. Efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.

MM-AQ-4 Truck Requirements.

- A. Building Design** – Prior to issuance of a building permit, March Joint Powers Authority (JPA) shall confirm the following:
- i. The loading docks shall be designed to accommodate SmartWay trucks.
 - ii. Conduit shall be installed in truck courts in logical locations that would allow for the future installation of charging stations for electric trucks, in anticipation of this technology becoming available.

- iii. Applicant shall provide project specifications, drawings, and calculations that demonstrate that main electrical supply lines and panels have been sized to support 'clean fleet' charging facilities, including heavy trucks and delivery vehicles, when these trucks become available. The calculations shall be based on reasonable predictions from currently available truck manufacturer's data. Electrical system upgrades that exceed reasonable costs shall not be required.
- B. **Anti-Idling Signs** – Prior to issuance of a certificate of occupancy, March JPA shall confirm the following:
- i. Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 3 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and (3) telephone numbers of the building facilities manager, South Coast Air Quality Management District, and CARB to report violations. Prior to the issuance of an occupancy permit, March JPA shall conduct a site inspection to ensure that the signs are in place. One 6-square-foot sign providing this information shall be located on the building between every two dock-high doors and the sign shall be posted in highly visible locations at the entrance gates, semi parking areas, and trailer parking locations.
- C. Prior to issuance of a certificate of occupancy, March Joint Powers Authority shall confirm any tenant agreement includes the following:
- i. Tenant to apply in good faith for funding to replace/retrofit their trucks, such as Carl Moyer, VIP, Prop 1B, SmartWay Finance, or other similar funds. If awarded, the tenant shall be required to accept and use the funding. Tenant shall be encouraged to consider the use of alternative fueled trucks, as well as new or retrofitted diesel trucks. Tenant shall also be encouraged to become SmartWay Partners, if eligible.
 - ii. Tenant shall monitor and ensure compliance with all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program, and the Statewide Truck and Bus Regulation, as applicable.

MM-AQ-5 Commute Trip Reduction. Prior to issuance of a certificate of occupancy, March Joint Powers Authority shall confirm any tenant agreement includes the following:

- A. Reservation of a total of 5% of vehicle/employee parking spaces for preferential spaces for carpools and van pools.
- B. Provision of short- and long- term bicycle parking facilities to meet peak season maximum demand (one bike rack space per 20 vehicle/employee parking spaces).
- C. Provision of "end-of-trip" facilities including showers, lockers, and changing space (four clothes lockers and one shower provided for every 80 employee parking spaces).
- D. Provision of on-site food vending machines or refrigerator, microwave oven, and mail facilities (i.e., drop box) at the project site. Office space shall include an on-site computer, internet connection, and other services for personal employee use.

- E. Requirement to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.

MM-AQ-6 Additional Air Quality Tenant Requirements. Prior to issuance of a certificate of occupancy, March JPA shall confirm any tenant agreement includes the following:

- A. Tenant shall not use diesel back-up generators, unless absolutely necessary. Tenant shall provide documentation demonstrating, to March JPA's satisfaction, that no other back-up energy source(s) are available and sufficient for the building's needs. If absolutely necessary, at the time of initial operation, generators shall have Best Available Control Technology (BACT) that meets CARB's Tier 4 emission standards or meets the most stringent in-use standard, whichever has the least emissions. In the event rental back-up generators are required during an emergency, the units shall be located at the project site for only the minimum time required. Tenant shall make every effort to utilize rental emergency backup generators that meet CARB's Tier 4 emission standards or have the least emissions.
- B. Tenant shall sweep the property monthly, including parking lot and truck court, to remove road dust, tire wear, brake dust, and other contaminants.
- C. Tenant shall comply with all applicable requirements of the MMRP, a copy of which shall be attached to each agreement.

3.2.6 Level of Significance after Mitigation

The Proposed Project would not exceed regional or localized thresholds for construction emissions (see Tables 3.2-9 and 3.2-13) and resulting impacts to sensitive receptors would be less than significant. Implementation of **MM-AQ-1** and **MM-AQ-2** would further reduce construction air quality emissions (see Tables 3.2-10 and 3.2-13).

The Proposed Project would result in a potentially significant impact regarding the potential to conflict with or obstruct implementation of an applicable AQMP. The Proposed Project has the potential to result in or cause NAAQS or CAAQS violations. Operational-source emissions would exceed the applicable SCAQMD regional thresholds for VOCs, NO_x, and CO. The Proposed Project would implement **MM-AQ-3** (Improved Energy Efficiency and Water Reduction), **MM-AQ-4** (Truck Requirements), **MM-AQ-5** (Commute Trip Reduction), and **MM-AQ-6** (Additional Air Quality Tenant Requirements) to reduce the Proposed Project's operational VOC, NO_x, and CO emissions; however, as discussed previously, the emissions would still exceed the thresholds. As such, the Proposed Project is considered to have the potential to conflict with the AQMP, as it would have the potential to conflict with Consistency Criterion 1 of the AQMP. The Proposed Project's impacts regarding the potential to conflict with or obstruct implementation of the SCAQMD's 2022 AQMP would be **significant and unavoidable**.

The Proposed Project's daily regional emissions from ongoing non-peak and peak operations would exceed SCAQMD's operational thresholds of significance for emissions of VOCs, NO_x, and CO. Therefore, a potentially significant impact would occur and would, per SCAQMD criteria, be potentially cumulatively significant. Most of the VOC, NO_x, and CO emissions would be from aircraft but there is no feasible mitigation to reduce these emissions because aircraft technology to control emissions has not been developed, although research is ongoing for controlling VOC, NO_x, and CO emissions and improving fuel efficiencies. Implementation of **MM-AQ-3 through MM-AQ-6** would reduce VOC, NO_x, and CO emissions. However, CalEEMod cannot accurately quantify these reductions; therefore, no numeric emissions credit has been taken in the analysis. As such, even with application of **MM-AQ-3 through MM-AQ-6**, the Proposed

Project's operational-source emissions impacts would remain **potentially significant**. Therefore, the Proposed Project would result in a **significant and unavoidable** impact regarding cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

The Proposed Project would result in **less-than-significant** impacts regarding the potential to result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and no mitigation is required.

3.2.7 Cumulative Effects

As described in Section 3.2.5, Impacts Analysis, implementation of the Proposed Project would result in potentially significant and unavoidable impacts to air quality due to daily operational emissions of VOCs, NO_x, and CO exceeding SCAQMD's significance thresholds (see Table 3.2-4). The primary source of air quality impacts would be emissions from aircraft during peak and non-peak season operation.

Air pollution by nature is largely a cumulative impact. The cumulative geographic context for air quality impacts is the SCAB. The nonattainment status of regional pollutants is a result of past and present development, and SCAQMD develops and implements plans for future attainment of ambient air quality standards. Appendix G of the CEQA Guidelines indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the significance determinations. SCAQMD has developed regional significance thresholds for some regulated pollutants. March JPA has relied on these significance thresholds to make significance determinations for the Project's air quality impacts.

SCAQMD's CEQA Air Quality Significance Thresholds (SCAQMD 2019a) indicates that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact. As stated in Appendix B-1, "SCAQMD has published a report on how to address cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (52). In this report the SCAQMD clearly states (Page D-3) '...the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR.'" Therefore, the air quality analysis for this Project assumed that individual projects that do not generate operational or construction emissions that exceed SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the SCAB is in nonattainment and therefore, would not be considered to have a significant adverse cumulative air quality impact. Conversely, projects exceeding SCAQMD's recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the SCAB is in nonattainment and therefore would be considered to have a significant adverse cumulative air quality impact.

In addition to SCAQMD's efforts, CARB has comprehensive regulatory programs in place for new and existing sources of air pollution. Local policies, such as land use decisions that involve siting, zoning, and permitting actions, in conjunction with air agency efforts have the potential to greatly enhance the effectiveness of these programs by addressing cumulative impacts in local areas. Project-specific emissions associated with implementation of the Proposed Project could result in regional and localized impacts. Regional pollutants such as O₃ and PM_{2.5} are derived from complex interactions of emissions from many sources. In contrast, localized, or near-source, pollutants such as SO₂ are mainly derived from a single source or group of sources. Cumulative air quality impacts are the effect of

long-term emissions of the Proposed Project plus any existing emissions at the same location, as well as the effect of long-term emissions of reasonably foreseeable similar projects, on the projected regional air quality or localized air pollution in the SCAB and surrounding areas. Accordingly, impacts can be localized or far-reaching and the geographic scope of air quality impacts varies based on the type of emission source.

Based on the cumulative nature of air pollution and the various mechanisms in place to reduce cumulative air pollutant emissions, project-level thresholds of significance for criteria pollutants, as analyzed in Section 3.2.5, are relevant in the determination of whether the Proposed Project's individual emissions would have a cumulatively significant impact on air quality. The potential for the Proposed Project to result in a cumulatively considerable air quality impact is evaluated in Section 3.2.5. The Proposed Project is expected to exceed SCAQMD's mass daily emission-based thresholds for VOCs, NO_x, and CO during operation and the Proposed Project would have the potential to conflict with SCAQMD's 2022 AQMP. As such, the Proposed Project's potential to result in a cumulatively considerable new increase of VOCs, NO_x, and CO for which the region is in nonattainment under an applicable federal or state ambient air quality standard would be **significant and unavoidable** even with the implementation of mitigation measures.

Health Risk from Cumulative Criteria Pollutants

As discussed under Threshold AQ-3, SCAQMD and SJVAPCD filed Amicus Curiae Briefs in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (*Friant Ranch*) (Appendix C-2). In both Amicus Curiae Briefs, SCAQMD and SJVAPCD provided technical explanations as to why it may not be feasible or reliable for a project to relate the expected adverse air quality impacts to likely health consequences.

As summarized below, for the reasons set forth in the SCAQMD and SJVAPCD Amicus Curiae Briefs, the Proposed Project's significant cumulative air quality impacts currently cannot feasibly be related to likely health consequences in an accurate or reliable manner. Although methods are being developed to determine health effects from large regional-scale projects, the technical demands to feasibly and accurately relate the adverse air quality impacts to likely health consequences are too high for this Project at this time. The technical challenges are listed below, with the SCAQMD and SJVAPCD Amicus Curiae Briefs (Appendix C-2) providing support on the findings for the Project:

- Ozone is not formed at the location of sources/emissions, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time. "For the so-called criteria pollutants, such as ozone, it may be more difficult to quantify health impacts. Ozone is formed in the atmosphere from the chemical reaction of the nitrogen oxides (NO_x) and volatile organic compounds (VOC) in the presence of sunlight... It takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources." (SCAQMD brief, p. 11)
- The quantity of precursor emissions is not proportional to local ozone and secondary PM concentration, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time. "Ground level ozone (smog) is not directly emitted into the air, but is formed when precursor pollutants such as oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) are emitted into the atmosphere and undergo complex chemical reactions in the process of sunlight. Once formed, ozone can be transported long distances by wind. Because of the complexity of ozone formation, a specific tonnage amount of NO_x or VOCs emitted in a particular area does not equate to a particular concentration of ozone in that area." (SJVAPCD brief, p.4)

- “Secondary PM, like ozone, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as sulfur dioxides (SO_x) and NO_x. Because of the complexity of secondary PM formation, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area.” (SJVAPCD brief, p. 5)
- Emissions do not cause health effects—they are caused by the resulting concentration of criteria pollutants, which is influenced by sunlight, complex reactions, and transport, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for this Project at this time. “The disconnect between the tonnage of precursor pollutants (NO_x, SO_x and VOCs) and the concentration of ozone or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting ozone or PM.” (SJVAPCD brief, p. 5)
- Currently available modeling tools are appropriate for regional evaluations, but not individual projects like the Proposed Project. “For instance, the computer models used to simulate and predict an attainment date for the ozone or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NO_x, SO_x and VOCs) and the atmospheric chemistry and meteorology of the Valley... the models simulate future ozone or PM levels based on predicted changes in precursor emissions Valley wide... The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District’s modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment” (SJVAPCD brief, p. 6-7). “Thus, the CEQA air quality analysis for criteria pollutants is not really a localized, project level impact analysis but one of regional, ‘cumulative impacts’” (SJVAPCD brief, p. 8). “The currently available modeling tools are equipped to model the impact of all emission sources in the Valley on attainment... Running the photochemical grid model used for predicting ozone attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved.” (SJVAPCD brief, pp. 9–10).
- SJVAPCD indicates that it is currently impossible to accurately correlate project-level emissions to specific health impacts. “Finally, even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like ozone and some particulates, it remains impossible, using today’s models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level.” (SJVAPCD brief, p. 10)
- SCAQMD highlights that CARB indicated that a CARB methodology of analysis for PM_{2.5} health impacts is not suited for a project such as this one. “Also, the California Air Resources Board (CARB) has developed a methodology that can predict expected mortality (premature deaths) from large amounts of PM_{2.5}... SCAQMD used the CARB methodology to predict impacts from three very large power plants (e.g., 731–1,837 lbs/day). Again, this project involved large amounts of additional PM_{2.5} in the District, up to 2.82 tons/day (5,650 lb/day of PM_{2.5}, or 1,029 tons/year... However, the primary author of the CARB methodology has reported that this PM_{2.5} health impact methodology is not suited for small projects and may yield unreliable results due to various uncertainties.” “Among these uncertainties are the representativeness of the population used in the methodology, and the specific source of PM and the corresponding health impacts” (SCAQMD brief, p. 14). Here, the maximum operational emissions of PM_{2.5} are 47.28 lb/day. This is 0.8% of the emissions that were used in the CARB methodology.
- The development of new technical approaches in the future may change the feasibility determination. To date, SCAQMD has not developed or approved a method to predict health impacts from criteria pollutants.

“Moreover, what is reasonably feasible may change over time as scientists and regulatory agencies continually seek to improve their ability to predict health impacts. For example, CARB staff has been directed by its Governing Board to reassess and improve the methodology for estimating premature deaths.” (SCAQMD brief, p. 16)

SCAG addressed the potential health implications of significant emissions that would result from implementation of the Connect SoCal RTP/SCS in the Connect SoCal RTP/SCS EIR (SCAG 2020).

For the reasons set forth above, it is not currently feasible to relate the Project’s air quality impacts to likely health consequences. Both SCAQMD and SJVACPD are responsible for assessing ozone and PM impacts and the potential health consequences from those on a regional basis. The current evaluation on the limitations and uncertainties of existing tools is consistent with SCAQMD and SJVAPCD findings. Currently available regional modeling tools are not designed to capture changes in pollutant concentrations for this Project that would be meaningful. This is due in part to a relatively coarse spatial resolution (e.g., greater than 4 kilometers × 4 kilometers), which makes it speculative to discern local project impacts on air quality.

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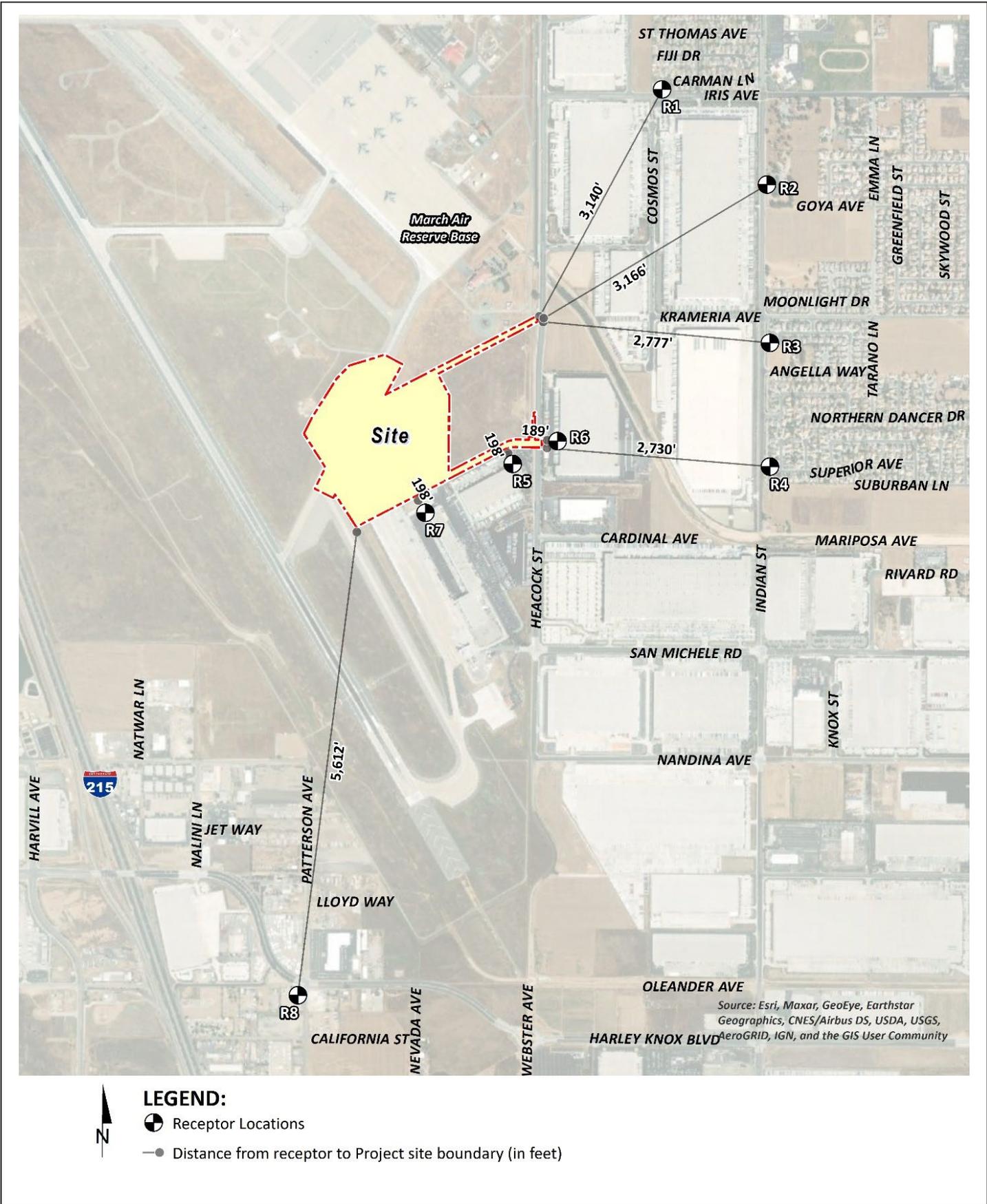
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SOURCE: Urban Crossroads HRA Report, 2024

FIGURE 3.2-1

Nearest Modeled Sensitive Receptors

Meridian D-1 Gateway Aviation Center Project

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3.3 Biological Resources

This section describes the existing biological resource conditions of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, evaluates potential impacts related to the implementation of the Proposed Project, and identifies mitigation measures required for the Proposed Project. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- D-1 Gateway Aviation Center Project Biological Technical Report (BTR), prepared in 2022 by Rocks Biological Consulting (Appendix D)
- D-1 Gateway Aviation Center Project Aquatic Resources Delineation Report prepared in 2022 by Rocks Biological Consulting (Appendix E to the BTR [Appendix D to this EIR])

These studies were prepared in compliance with the California Environmental Quality Act (CEQA) and other applicable environmental regulations. Furthermore, the analysis within this section involved review of existing biological resources; technical data; and applicable laws, regulations, and guidelines to adequately assess potential impacts to biological resources. Other sources consulted are listed in Section 3.3.8, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March Joint Powers Authority (JPA). The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.3.1 Existing Conditions

The following discussion summarizes the existing biological resources present within the project site and overall biological study area (BSA; Figure 3.3-1, Biological Resources), and includes a description of the vegetation communities, special-status species, and jurisdictional waters, including wetlands, within the project site and the BSA. The BTR and the Aquatic Resources Delineation Report analyzed the project site plus a 100-foot buffer.

Vegetation Communities and Land Covers

The BSA supports six vegetation communities and other land covers, as identified in Table 3.3-1 and Figure 3.3-1. Most of the project site is routinely mowed; thus, site conditions are atypical and mapping was performed based on conditions observed during May 12, 2020, and January 13, 2021, field visits.

Vegetation communities and land covers mapped within the BSA are primarily composed of non-native vegetation and land covers; however, minimal native riparian vegetation was mapped within the drainage features. Most of the project site is routinely mowed, and this human-caused disturbance causes conditions that are atypical of a natural vegetation community. The BSA contains red brome or Mediterranean grass grasslands, upland mustards

and other ruderal forbs, Goodding’s willow–red willow riparian woodland and forest, disturbed habitat, developed land, and ornamental vegetation, as listed in Table 3.3-1.

Table 3.3-1. Vegetation Communities and Land Covers within the BSA and the Project Site

Vegetation Community (Holland) ^a	Vegetation Community (Sawyer et al.) ^b	Global, State Rank ^c	BSA Acres	Project Site Acres
Non-native grassland	Red brome or Mediterranean grass grasslands	None	49.8	32.2
Ruderal	Upland mustards and other ruderal forbs	–	0.6	0.6
<i>Salix gooddingii</i>	Goodding’s willow–red willow riparian woodland and forest	G4S3	0.04	0.02
Disturbed habitat	Developed/disturbed	None	2.6	1.0
Developed land	Developed/disturbed	None	20.2	11.7
Ornamental vegetation	Developed/disturbed	None	0.6	0.08
Totals^d			73.9	45.6

Notes: BSA = biological study area; G4S3 = Global Rank 4, State Rank 3.

^a Holland 1986.

^b Sawyer et al. 2009.

^c NatureServe Global and State rarity ranks per Faber-Langendoen et al. (2012). Natural communities with global or state ranks of 1–3 are considered Sensitive Natural Communities by the California Department of Fish and Wildlife (CDFW 2020a) and are to be addressed in the environmental review processes of CEQA.

^d Acreages may not sum precisely due to rounding.

Habitats were classified based on the dominant and characteristic plant species in accordance with vegetation community classifications outlined in Holland’s Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) and consistent with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) vegetation mapping classifications. Note that information regarding how each community is classified under the Manual of California Vegetation, 2nd Edition (Sawyer et al. 2009) is also provided herein for reference.

Red Brome or Mediterranean Grass Grasslands (Non-Native Grassland)

Non-native grassland generally occurs on fine-textured loam or clay soils that are moist during the summer and fall (Holland 1986). Non-native grassland within the project site is largely dominated by red brome (*Bromus madritensis* ssp. *rubens*), wild oat (*Avena barbata*), and rat-tail fescue (*Festuca myuros*). This community represents the majority of the project site and is frequently mowed. This community also supports consistent cover of paniculate tarplant (*Deinandra paniculata*), a California Rare Plant Rank (CRPR) 4.2 species, meaning that the species has a limited distribution in California but is apparently secure in the state.

Upland Mustards and Other Ruderal Forbs (Ruderal)

Ruderal vegetation is typically found in areas with past vegetation clearing, development, or agricultural activities, and subsequently contains disturbed vegetative cover that is greater than 50% broad-leaved, non-native species. The ruderal vegetation community within the project site is heavily dominated by common sow-thistle (*Sonchus oleraceus*), short-pod mustard (*Hirschfeldia incana*), and red-stem filaree (*Erodium cicutarium*). This community represents a small patch in the southwestern edge of the project site.

Goodding's Willow-Red Willow Riparian Woodland and Forest (*Salix gooddingii*)

Salix gooddingii riparian woodlands generally occur in mesic environments such as drainages. This community within the project site is dominated by Goodding's black willow (*Salix gooddingii*) and willow baccharis (*Baccharis salicina*). This community is confined to a drainage feature at the southern boundary of the project site and has become established from, and is supported by, artificial runoff.

Disturbed Habitat

Disturbed habitat is marked by the predominance of bare ground and compacted soils, with a sparse covering of non-native plant species and other disturbance-tolerant plant species. This land cover occupies the southern and eastern portions of the project site.

Developed Land

Developed lands support little to no native vegetation and are composed of human-made structures and landscaping. Developed areas within the project site include paved roadways and a paved lot occupying the southern and eastern portions of the project site.

Special-Status Plant and Wildlife Species

For this analysis, special-status plant species include those that are (1) endangered or threatened wildlife species recognized in the context of the California Endangered Species Act (CESA) and the federal Endangered Species Act (ESA); (2) CRPR 1 and 2 (CNPS 2020); or (3) considered rare, endangered, or threatened by the California Department of Fish and Wildlife (CDFW) or local government agencies. Species with CRPR 1 and 2 are considered rare, threatened, or endangered in California (CNPS 2020). Species with CRPR 3 and 4 are those that require more information to determine status and plants of limited distribution (CNPS 2020); however, CRPR 3 and 4 plant species are typically not analyzed according to CEQA.

Special-status wildlife species include those that are (1) endangered or threatened wildlife species recognized in the context of CESA and ESA, (2) California species of special concern and Watch List species as designated by CDFW, and (3) mammals and birds that are fully protected species as described in California Fish and Game Code Sections 4700 and 3511.

Special-status plant and wildlife species with a "low" or "very low" potential to occur have limited or marginally suitable habitat in the project site and, if present, would be represented by only a few individuals. If a species listed under CESA or ESA has a low or very low potential to occur, it is analyzed further to address potential impacts to individuals of the species given that any loss may be considered significant. If a species is not listed under CESA or ESA, the loss of a few individuals would not cause the species to be considered for listing; therefore, additional analysis would not be warranted because impacts would not be significant.

Special-Status Plants

A total of 28 special-status plant species have been recorded in the project vicinity and were assessed for potential to occur on the project site (CDFW 2020b; CNPS 2020). A focused special-status plant survey was conducted in May 2020, and all late-spring- and early-summer-blooming annuals were included as target species during this survey. No special-status species were detected. All other species were determined to have no or low potential to occur and will not be analyzed further. All special-status species analyzed for potential to occur in the project site are listed in Table 3.3-2.

Table 3.3-2. Potential to Occur for Special-Status Plant Species Recorded in the Project Vicinity

Species	Status	Habitat Description	Potential to Occur
Bristly sedge (<i>Carex comosa</i>)	CRPR 2B.1	Perennial rhizomatous herb. Blooms May–September. Coastal prairie, marshes and swamps (lake margins), valley and foothill grasslands. Elevation 0–2,050 feet amsl.	Very low potential to occur. Suitable coastal prairies, marshes, and swamps not present. Grassland habitat on site is disturbed.
California satintail (<i>Imperata brevifolia</i>)	CRPR 2B.1	Perennial rhizomatous herb. Blooms September–May. Chaparral, coastal scrub, Mojavean desert scrub, alkali meadows and seeps, and riparian scrub. Elevation 0–3,986 feet amsl.	Very low potential to occur. No chaparral, coastal scrub, Mojavean desert scrub, alkali meadows and seeps, or riparian scrub habitat present.
California screw moss (<i>Tortula californica</i>)	CRPR 1B.2	Moss. Sandy soils within chenopod scrub, valley and foothill grassland. Elevation 30–4,790 feet amsl.	Very low potential to occur. Suitable chenopod scrub not present. Grassland habitat on site is disturbed.
Chaparral ragwort (<i>Senecio aphanactis</i>)	CRPR 2B.2	Annual herb. Blooms January–April. Chaparral, cismontane woodland, and coastal scrub. Elevation 50–2,625 feet amsl.	Very low potential to occur. No chaparral, cismontane woodland, or coastal scrub habitat present.
Chaparral sand verbena (<i>Abronia villosa</i> var. <i>aurita</i>)	CRPR 1B.1	Annual herb. Blooms January–September. Sandy chaparral, coastal scrub, and desert dunes. Elevation 245–5,250 feet amsl.	Very low potential to occur. Suitable sandy habitat not present.
Coulter’s goldfields (<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>)	CRPR 1B.1	Annual herb. Blooms February–June. Coastal salt marshes and swamps, playas, and vernal pools. Elevation 3–4,002 feet amsl.	Low potential to occur. Suitable vernal pool habitat and adjacent upland habitats limited. Species was not detected and would have been detectable during 2020–2021 Proposed Project surveys.
Horn’s milk-vetch (<i>Astragalus hornii</i> var. <i>hornii</i>)	CRPR 1B.1	Annual herb. Blooms May–October. Lake margins, alkaline, meadows and seeps, and playas. Elevation 195–2,790 feet amsl.	Very low to no potential to occur. Suitable aquatic habitats not present.
Jaeger’s milk-vetch (<i>Astragalus pachypus</i> var. <i>jaegeri</i>)	CRPR 1B.1	Perennial shrub. Blooms December–June. Sandy or rocky soils within chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Elevation 1,195–3,200 feet amsl.	Low potential to occur. Suitable chaparral, cismontane woodland, or coastal scrub not present. Grassland habitat on site is disturbed.
Long-spined spineflower (<i>Chorizanthe polygonoides</i> var. <i>longispina</i>)	CRPR 1B.2	Annual herb. Blooms April–July. Chaparral, coastal scrub, meadows and seeps, valley/foothill grassland, and vernal pools. Elevation 98–5,020 feet amsl.	Low potential to occur. Suitable vernal pool habitat and adjacent upland habitats limited. Species was not detected and would have been detectable during 2020–2021 Proposed Project surveys.

Table 3.3-2. Potential to Occur for Special-Status Plant Species Recorded in the Project Vicinity

Species	Status	Habitat Description	Potential to Occur
Los Angeles spineflower (<i>Helianthus nuttallii</i> ssp. <i>parishii</i>)	CRPR 1A	Perennial rhizomatous herb. Blooms August–October. Marshes and swamps (coastal saltwater and freshwater). Elevation 30–5,005 feet amsl.	Very low potential to occur. Marshes and swamps not present.
Mesa horkelia (<i>Horkelia cuneata</i> var. <i>puberula</i>)	CRPR 1B.1	Perennial herb. Blooms February–September. Maritime chaparral, cismontane woodland, and coastal scrub. Elevation 230–2,657 feet amsl.	Very low potential to occur. Suitable maritime chaparral, cismontane woodland, or coastal scrub not present.
Mud nama (<i>Nama stenocarpa</i>)	CRPR 2B.2	Annual/perennial herb. Blooms January–July. Marshes and swamps (lake margins, riverbanks). Elevation 15–1,640 feet amsl.	Very low potential to occur. Marshes and swamps not present.
Munz’s onion (<i>Allium munzii</i>)	FE; ST; CRPR 1B.1	Perennial bulbiferous herb. Blooms March–May. Chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Elevation 970–3,510 feet amsl.	Very low potential to occur. Suitable chaparral, cismontane woodland, coastal scrub, or pinyon and juniper woodland not present. Grassland habitat on site is disturbed.
Nevin’s barberry (<i>Berberis nevinii</i>)	FE; SE; CRPR 1B.1	Perennial evergreen shrub. Blooms February–June. Chaparral, cismontane woodland, coastal scrub, and riparian scrub. Elevation 230–2,705 feet.	No potential to occur. Species is visible year-round and was not detected during surveys.
Paniculate tarplant (<i>Deinandra paniculata</i>) ^a	CRPR 4.2	Annual herb. Blooms April–November. Coastal scrub, valley/ foothill grassland, vernal pools. Elevation 82–3,084 feet.	Present. Known from area and suitable habitat is present. Species observed during 2020 rare plant survey. Not a special-status species.
Parish’s brittlescale (<i>Atriplex parishii</i>)	CRPR 1B.1	Annual herb. Blooms June–October. Chenopod scrub, playas, and vernal pools within alkaline habitat. Elevation 82–6,233 feet amsl.	Very low potential to occur. No suitable alkaline habitat present.
Parish’s bush mallow (<i>Malacothamnus parishii</i>)	CRPR 1A	Perennial deciduous shrub. Blooms June–July. Chaparral, coastal scrub. Elevation 1,000–1,495 feet amsl.	Very low potential to occur. Suitable chaparral and coastal scrub habitat not present.
Parry’s spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>)	CRPR 1B.1	Annual herb. Blooms April–June. Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Elevation 900–4,000 feet amsl.	Low potential to occur. Suitable chaparral, cismontane woodland, or coastal scrub not present. Grassland habitat on site is disturbed.
Prairie wedge grass (<i>Sphenopholis obtusata</i>)	CRPR 2B.2	Perennial herb. Blooms April–July. Cismontane woodland, meadows and seeps. Elevation 984–6,561 feet amsl.	Very low potential to occur. No woodlands, meadows, or seeps present.

Table 3.3-2. Potential to Occur for Special-Status Plant Species Recorded in the Project Vicinity

Species	Status	Habitat Description	Potential to Occur
Salt spring checkerbloom (<i>Sidalcea neomexicana</i>)	CRPR 2B.2	Perennial herb. Blooms March–June. Chaparral, coastal scrub, lower montane coniferous forests, Mojavean desert scrub, and playas. Elevation 50–5,020 feet amsl.	Very low potential to occur. Suitable chaparral, coastal scrub, lower montane coniferous forests, Mojavean desert scrub, and playas not present.
San Bernardino aster (<i>Symphotrichum defoliatum</i>)	CRPR 1B.2	Perennial rhizomatous herb. Blooms July–November. Cismontane woodlands, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernal mesic valley/foothill grasslands. Elevation 7–6,690 feet amsl.	Very low potential to occur. No associated habitats or suitable mesic habitat present.
San Jacinto Valley crownscale (<i>Atriplex coronata</i> var. <i>notatior</i>)	FE; CRPR 1B.1	Annual herb. Blooms April–August. Playas, mesic valley/foothill grasslands, and vernal pools within alkaline habitat. Elevation 456–1,640 feet amsl.	Very low potential to occur. No suitable alkaline habitat present.
Santa Ana River woollystar (<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>)	FE; SE; CRPR 1B.1	Perennial herb. Blooms April–September. Chaparral and coastal alluvial fan scrub. Elevation 298–2,000 feet amsl.	Very low potential to occur. No chaparral or coastal alluvial fan scrub present.
Slender-horned spineflower (<i>Dodecahema leptoceras</i>)	FE; SE; CRPR 1B.1	Annual herb. Blooms April–June. Chaparral, cismontane woodland, and alluvial fan coastal scrub. Elevation 655–2,490 feet amsl.	Very low potential to occur. No chaparral, cismontane woodland, or alluvial fan coastal scrub present.
Smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>)	CRPR 1B.1	Annual herb. Blooms April–September. Chenopod scrub, meadows and seeps, playa, riparian woodland, valley and foothill grassland. Elevation 0–2,100 feet amsl.	Very low potential to occur. This species is known from the area but was not observed during the May 2020 surveys or the April 2021 surveys.
Spreading navarretia (<i>Navarretia fossalis</i>)	FT; CRPR 1B.1	Annual herb. Blooms April–June. Chenopod scrub, shallow freshwater marshes and swamps, playas, and vernal pools. Elevation 98–2,150 feet amsl.	Low potential to occur. Suitable vernal pool habitat and adjacent upland habitats limited. Species was not detected and would have been detectable during 2020–2021 surveys.
Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	FT; SE; CRPR 1B.1	Perennial bulbiferous herb. Blooms March–June. Chaparral, cismontane woodlands, coastal scrub, playas, valley/foothill grasslands, and vernal pools. Elevation 82–3,675 feet amsl.	Low potential to occur. Suitable vernal pool habitat and adjacent upland habitats limited. Species was not detected and would have been detectable during 2020–2021 surveys.

Table 3.3-2. Potential to Occur for Special-Status Plant Species Recorded in the Project Vicinity

Species	Status	Habitat Description	Potential to Occur
White-bracted spineflower (<i>Chorizanthe xanti</i> var. <i>leucotheca</i>)	CRPR 1B.2	Annual herb. Blooms April–June. Sandy or gravelly soils within coastal scrub (alluvial fans), Mojavean desert scrub, and pinyon and juniper woodland. Elevation 980–3,935 feet amsl.	Very low potential to occur. Suitable coastal scrub, Mojavean desert scrub, or pinyon and juniper woodland not present.
Wright’s trichocoronis (<i>Trichocoronis wrightii</i> var. <i>wrightii</i>)	CRPR 2B.1	Annual herb. Blooms May–September. Alkaline environments within meadows and seeps, marshes and swamps, riparian forest, and vernal pools. Elevation 15–1,425 feet amsl.	Very low potential to occur. No suitable alkaline habitat present.

Status

FE: Federally endangered species under the Endangered Species Act

FT: Federally threatened species under the Endangered Species Act

SE: State endangered under the California Endangered Species Act

ST: State threatened under the California Endangered Species Act

CRPR (California Rare Plant Rank):

1A: Plants presumed extirpated in California and rare or extinct elsewhere

1B: Plants rare, threatened, or endangered in California and elsewhere

2B: Plants rare, threatened, or endangered in California, but more common elsewhere

4: Plant for which there is limited distribution

Threat Rank

0.1: Seriously threatened in California (more than 80% of occurrences threatened/high degree and immediacy of threat)

0.2: Moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)

Notes: amsl = above mean sea level.

^a Paniculate tarplant is not considered special status; however, it is included in this table because it is a native species that has been observed in the BSA and that has a CRPR.

One CRPR 4.2 species, paniculate tarplant, was observed on the project site. Approximately 1,000 individuals of paniculate tarplant were observed within the non-native grasslands of the project site. Paniculate tarplant has a CRPR of 4.2 (CNPS 2020), meaning that the species has a limited distribution in California but is considered secure in the state. Species with CRPR 4 are not considered “rare,” but only limited in distribution or infrequent throughout a broader range in California (e.g., “Watch List” species) (CNPS 2020). Thus, given that CEQA requires findings of significance for projects that “threaten to ... reduce the number or restrict the range of a rare or endangered plant,” paniculate tarplant will not be analyzed further. Although it is not categorized as a special-status species, because this species with a CRPR ranking was observed on the project site, it has been included in Table 3.3-2 for informational purposes.

Smooth tarplant was not observed on the project site; however, the special-status species is known to occur in the region and was included in the special-status plant survey as a focal species. Smooth tarplant has a CRPR of 1B.1 (CNPS 2020), meaning it is rare, threatened, or endangered in California and elsewhere, and seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat). Smooth tarplant holds a State Rank of S2, meaning the plant is imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state. Focused surveys for this species conducted in 2020 within the BSA were negative. The 2020 focused plant survey was conducted following a normal rainfall year (NOAA 2020; WRCC 2021) expected to support increased germination of annual species, including smooth tarplant, if present at the project site.

Special-Status Wildlife

A total of 18 special-status wildlife species with recorded occurrences (CDFW 2020b) in the project vicinity were assessed for potential to occur on the project site. No federally or state-listed endangered species were observed within or immediately adjacent to the project site during Proposed Project surveys; however, three listed species—Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fairy shrimp (*Branchinecta lynchi*), and Stephens’ kangaroo rat (*Dipodomys stephensi*)—were determined to have a moderate potential to occur, and focused surveys for these species have been conducted. Two CDFW species of special concern, burrowing owl (*Athene cunicularia*) and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), were observed on the project site during surveys and are assumed present. One additional special-status species, California glossy snake (*Arizona elegans occidentalis*), was not observed on the project site but has a moderate potential to occur. All species analyzed for potential to occur within the project site are listed in Table 3.3-3. In addition, California horned lark (*Eremophila alpestris actia*), a CDFW Watch List species, was observed. Watch List species are not considered special status; therefore, this species will not be analyzed further but is included in Table 3.3-3 for informational purposes.

Table 3.3-3. Potential to Occur for Special-Status Wildlife Species Recorded in the Project Vicinity

Species	Status	Habitat Description	Potential to Occur
Invertebrates			
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	FE	Vernal pools or other seasonal pools with a depth greater than 30 centimeters.	Absent. Limited ponding features observed during surveys that appear to be deep enough for this species, which typically occurs in pools greater than 30 centimeters in depth. This species was confirmed absent via protocol surveys.
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	Natural vernal pools or other seasonal pools.	Absent. Potential ponding features observed on site may be suitable for this species, which is typically found in deep, naturally occurring vernal pools. This species was confirmed absent via protocol surveys.
Amphibians			
Western spadefoot (<i>Spea hammondi</i>)	SSC	Temporary ponds, vernal pools, and backwaters of flowing creeks, as well as adjacent upland habitats such as grasslands and coastal sage scrub for burrowing.	Low to moderate potential to occur. Suitable vernal pool habitats and adjacent upland habitats are limited. Flowing creeks not present. This species was not detected during focused surveys for fairy shrimp.
Reptiles			
California glossy snake (<i>Arizona elegans occidentalis</i>)	SSC	Arid scrub, rocky washes, grasslands, and chaparral habitats. Prefers habitats containing open areas and loose soils for burrowing.	Moderate potential to occur. Suitable arid grassland habitat containing loose soils present.
Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	SSC	A variety of rocky, sandy, dry habitats, including sage scrub, chaparral, and woodlands on friable loose soil.	Low potential to occur. Suitable habitats are not present on site; this species is more common near the coast.

Table 3.3-3. Potential to Occur for Special-Status Wildlife Species Recorded in the Project Vicinity

Species	Status	Habitat Description	Potential to Occur
Coast horned lizard (<i>Phrynosoma blainvillii</i>)	SSC	A variety of habitats, including sage scrub, chaparral, and coniferous and broadleaf woodlands. Found on sandy or friable soils with open scrub. Requires open areas, bushes, and fine loose soil.	Low potential to occur. Suitable habitat not present on site; this species is more common near the coast.
Red-diamond rattlesnake (<i>Crotalus ruber</i>)	SSC	Chaparral, coastal sage scrub, along creek banks, and in rock outcrops or piles of debris. Often associated with dense vegetation in rocky areas.	Low potential to occur. Suitable rocky outcrops within scrub and chaparral habitat not present.
Birds			
Burrowing owl (<i>Athene cunicularia</i>)	SSC	Found in grasslands and open scrub from the coast to foothills. Strongly associated with California ground squirrel (<i>Otospermophilus beecheyi</i>) and other fossorial mammal burrows.	Present. Species observed at burrow (breeding) sites during summer 2020 general biological surveys.
California horned lark (<i>Eremophila alpestris actia</i>) ^a	WL	Found from coastal deserts and grasslands to alpine dwarf-shrub habitat above treeline. Also seen in coniferous or chaparral habitats.	Present. Species observed on site during 2020 general biological surveys.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE; SE	Riparian woodland with understory of dense young willows or mulefat and willow canopy. Nests often placed along internal or external edges of riparian thickets.	Very low potential to occur. Suitable riparian habitat not present.
Loggerhead shrike (<i>Lanius ludovicianus</i>)	SSC	Found within grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation used for nesting.	Low potential to occur. Suitable foraging habitat is present, but dense nesting habitat is not present.
Mammals			
Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>)	SSC	Found in low-elevation grassland, alluvial sage scrub, and coastal sage scrub.	Low potential to occur. Alluvial sage scrub and coastal sage scrub not present; however, grassland habitat present. Burrows consistent with this species were observed during 2020 general biological surveys; however, Los Angeles pocket mouse sign was not observed. Repeated disturbance of the site has likely precluded this species from occurring on site.
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	SSC	Rugged cliffs, rocky outcrops, and slopes in desert shrub and pine oak forests.	Low potential to occur. Rocky outcrops and cliffs not present.

Table 3.3-3. Potential to Occur for Special-Status Wildlife Species Recorded in the Project Vicinity

Species	Status	Habitat Description	Potential to Occur
San Bernardino kangaroo rat (<i>Dipodomys merriami parvus</i>)	FE, SSC	Primarily found in alluvial scrub and floodplain habitats containing sandy loam substrate and open vegetative cover.	Low potential to occur. Suitable alluvial scrub and floodplain habitat not present.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	SSC	Early stages of chaparral, open coastal sage scrub, and grasslands near the edges of brush. Uses open land but requires some shrubs for cover.	Present. Although the site is fairly disturbed, suitable foraging habitat is present for this species.
Southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	SSC	Occurs primarily in desert scrub habitats. Habitats with low open and semi-open scrubs habitats, including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs, are less frequently inhabited by this species.	Low potential to occur. Suitable desert habitat with friable soils lacking. Grassland habitat is present on site; however, repeated disturbance of the site would likely preclude this species from occurring on site.
Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	FE; ST	Habitats include annual grassland and coastal sage scrub with sparse shrub cover. Commonly in association with <i>Eriogonum fasciculatum</i> , <i>Artemisia californica</i> , and red-stem filaree (<i>Erodium cicutarium</i>) in areas with loose, friable, well-drained soil, and flat or gently rolling terrain.	Very low potential to occur; 2020 focused trapping surveys were negative. Habitat suitability considered moderate, as grassland habitat, red-stem filaree, and friable soils present.
Western mastiff bat (<i>Eumops perotis californicus</i>)	SSC	Chaparral, live oaks, and arid, rocky regions. Requires downward opening crevices.	Low potential to occur. Suitable roosting crevices not present.
Western yellow bat (<i>Lasiurus xanthinus</i>)	SSC	Occupies a range of habitats in arid and dry areas. Inhabits secluded woodlands, agricultural lands, and sometimes residential areas.	Low potential to occur. Suitable roosting habitat not present.

Status

FE: Federally endangered species under the Endangered Species Act
 FT: Federally threatened species under the Endangered Species Act
 SE: State endangered under the California Endangered Species Act
 ST: State threatened under the California Endangered Species Act
 SSC: California Department of Fish and Wildlife species of special concern
 WL: California Department of Fish and Wildlife Watch List species

Note:

^a Horned lark is not considered special status; however, it is included in this table because it was observed within the BSA and it is a CDFW Watch List species.

Fairy Shrimp

Riverside Fairy Shrimp

Based on the 2008 5-year review for Riverside fairy shrimp, there are 45 known extant or presumed extant occurrences in approximately 200 vernal pools and vernal pool complexes. A California Natural Diversity Database query (CDFW 2020b) lists two historical occurrences of Riverside fairy shrimp. One population 1 mile northwest of the project site is considered possibly extirpated, and one additional population located approximately 1.8 miles north of the project site is listed as extirpated (CDFW 2020b).

The project site supports potential ponding features that are likely capable of retaining inundation for periods greater than 120 days and therefore may be suitable for Riverside fairy shrimp. Because Riverside fairy shrimp has a moderate potential to occur, focused surveys in accordance with the Survey Guidelines for the Listed Large Branchiopods (Branchiopod Survey Guidelines; USFWS 2017) were conducted. Protocol dry-season surveys were conducted on October 21, 2020, and results for *Streptocephalus* cysts were negative. Wet-season surveys were conducted from December 2020 to April 2021 and were negative for listed branchiopods. Riverside fairy shrimp are considered absent from the project site. The complete fairy shrimp survey report is provided as Appendix F of the BTR (Appendix D of this EIR).

Vernal Pool Fairy Shrimp

This species has not been reported on the project site (CDFW 2020b). However, on-site ponding features support potentially suitable habitat for vernal pool fairy shrimp. Vernal pool fairy shrimp require a long ponding period that deeper pools, such as those at the Santa Rosa Plateau with depths up to 16 inches, provide (Chester 2007). The project site supports features that likely remain inundated for long periods, and therefore may be suitable for vernal pool fairy shrimp. Because vernal pool fairy shrimp has a low to moderate potential to occur, focused surveys in accordance with the Branchiopod Survey Guidelines (USFWS 2017) were conducted. Protocol dry-season surveys were conducted on October 21, 2020, and results for *Branchinecta* cysts were positive; however, after hydration and hatching of cysts, only the non-listed and non-special-status versatile fairy shrimp (*Branchinecta lindahli*) was documented. Wet-season surveys were conducted from December 2020 to April 2021 and were negative for listed branchiopods. Vernal pool fairy shrimp are considered absent from the project site. The complete fairy shrimp survey report is provided as Appendix F of the BTR (Appendix D).

Stephens' Kangaroo Rat

Stephens' kangaroo rat has been reported within 1 mile of the project site (CDFW 2020b). Suitable grassland habitat containing red-stem filaree is present on the project site, and burrows consistent with this species were observed during 2020 general biological surveys. Due to the disturbed nature (disked soil) of the project site, the probability of an extant, on-site Stephens' kangaroo rat population is not as high as it might have been historically; however, this species was considered to have a moderate potential to occur. Focused trapping surveys were conducted in November 2020 by Dr. Phil Brylski (U.S. Fish and Wildlife Service [USFWS] permit no. TE-148555-2) in accordance with the requirements of his permit. Results of protocol surveys were negative. The complete Stephens' kangaroo rat survey report is presented in Appendix G to the BTR (Appendix D).

Burrowing Owl

Qualified biologist and avian specialist Chris Thomson documented burrowing owl on the project site and in the BSA during general biological surveys in May 2020 and January 2021. Mr. Thomson is an experienced burrowing owl surveyor and meets the qualifications outlined in the Staff Report on Burrowing Owl Mitigation (CDFG 2012). Because of the incidental observations of owls during the general biological surveys, burrowing owl is assumed to be present within the project site and protocol surveys were not deemed necessary for the purposes of this analysis, given that the species' presence was already confirmed. The burrowing owls on the project site were studied during general biological surveys to determine the number of owls present and to document all active burrows on the site.

Four individual burrowing owls were documented on the project site. A pair of burrowing owls was observed at a burrow on the northern boundary of the project site, and an individual burrowing owl was observed at a burrow in the southeastern portion of the project site. In addition, one individual was observed in the central portion of the project site; however, it is unclear if this was one of the previously identified burrowing owls (refer to Figure 3.3-1). In addition, multiple burrows were observed throughout the site that did not appear to be active but that have the potential to support burrowing owls.

San Diego Black-Tailed Jackrabbit

The project site contains grassland habitat with openings that are suitable for the foraging of San Diego black-tailed jackrabbit. This species was incidentally observed during general biological surveys and therefore is confirmed present on the project site.

California Glossy Snake

The project site contains arid grassland habitat with loose soils that are suitable for California glossy snake. This species was not observed during general biological surveys; however, it has a moderate potential to occur on the project site.

Jurisdictional Wetlands and Non-Wetland Waters

Jurisdictional waters regulated by the U.S. Army Corps of Engineers (USACE) and the Santa Ana Regional Water Quality Control Board (RWQCB) were delineated using the routine determination methods set forth in Part IV, Section D, Subsection 2 of the USACE 1987 Wetland Delineation Manual (USACE 1987) and the 2008 Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region Version 2.0 (USACE 2008). Jurisdictional non-wetland waters are determined by the ordinary high water mark (OHWM), which is defined in Title 33 of the Code of Federal Regulations (CFR), Part 329.11, as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas."

Potential CDFW-jurisdictional non-wetland boundaries were determined based on the presence of lake and/or streambed and riparian habitat. Streambeds considered within CDFW jurisdiction were delineated based on the definition of streambed as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). Water that flows "periodically" is synonymous with "ephemeral" flows, which occur following rain events and cease soon after. "Riparian habitat" refers to vegetation and habitat associated with a stream. CDFW-jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream.

The jurisdictional delineation of the project site was conducted on June 3, 2020, during a normal precipitation year. The full methodology and survey results are provided in the Aquatic Resources Delineation Report, which is Appendix E to the BTR (refer to Appendix D to this EIR). A summary is provided below.

Waters of the United States

Two features met the parameters for federal wetland waters (FW WW) and two features were identified as federal non-wetland waters (FW NWW).¹ FW WW-1 and FW WW-2 met the three federal wetland parameters, whereas FW NWW-1A displayed various indicators of an OHWM, such as a change in vegetation species between the channel and adjacent uplands and an artificial bed and bank. FW NWW-1B met the appropriate wetland parameters to qualify as a potential wetland water of the United States; however, based on guidance provided by USACE, wetlands within an OHWM constitute potential non-wetland waters of the United States. As such, FW NWW-1A and FW NWW-1B would be considered potential non-wetland waters of the United States. More information about these features is provided in Appendix E to the BTR (refer to Appendix D of this EIR).

Approximately 0.35 acres (1,162 linear feet) of potential non-wetland waters of the United States associated with FW NWW-1A and FW NWW-1B and 0.10 acres of potential wetland waters of the United States associated with FW WW-1 and FW WW-2 occur within the project site, as further detailed in Table 3.3-4 and as shown on Figure 3.3-2, Aquatic Resources, USACE. Linear footage was not calculated for FW WW-1 and FW WW-2 because these features are considered seasonally inundated depressions not associated with a linear riverine feature. These features are described further under “Wetland Waters of the United States” and “Non-Wetland Waters of the United States.”

Table 3.3-4. USACE-Jurisdictional Wetland and Non-Wetland Waters on the Project Site

Aquatic Resource Name	Acres ^a	Linear Feet	Presence of OHWM/Wetland	Estimated OHWM Width (Min–Max) (linear feet)	Cowardin Code	Dominant Vegetation	Location (Latitude, Longitude)
FW NWW-1A	0.34	1,139	Yes/No	10–30	R6	Non-native grassland	33.876241, -117.248628
FW NWW-1B	0.01	22	Yes/Yes	13–18	R6	Non-native grassland	33.876558, -117.250668
FW WW-1	0.04	N/A ^b	No/Yes	7–21	PEM	Non-native grassland	33.876243, -117.250595
FW WW-2	0.07	N/A ^b	No/Yes	12–29	PEM	Non-native grassland	33.876932, -117.24846
Total	0.45	1,162	N/A	N/A	N/A	N/A	N/A

Source: Cowardin et al. 1979; Appendix D.

Notes: USACE = U.S. Army Corps of Engineers; OHWM = ordinary high water mark; FW = federal waters; NWW = non-wetland waters; WW = wetland waters; N/A = not applicable.

^a Acreages rounded to the hundredths based on raw numbers provided during geographic information system (GIS) analysis.

^b Linear footage not calculated because the feature is considered a seasonally inundated depression not associated with a linear riverine feature.

¹ Note that the feature names in the associated figures for this section do not include “FW” (i.e., federal waters) in front of the names because the applicable water resource agency is noted in the figure title.

Wetland Waters of the United States

FW WW-1 is a disturbed, seasonally inundated depression that was artificially constructed as a result of soil borrowing for road grading of an adjacent road. This feature is located directly east of the airplane runway in the western portion of the project site. FW WW-1 did not display an observable OHWM or bed and bank; however, it did display drainage patterns and surface soil cracks indicative of ponding within a depressional area, as well as a dark layer of biotic crust. Wetland delineation data were collected within the primarily earthen bottom of FW WW-1 to confirm the presence or absence of wetland parameters. FW WW-1 met the hydrophytic vegetation, hydric soil, and wetland hydrology parameters. The vegetated portions of this feature are dominated by smoothseed pygmyweed (*Crassula solieri*; obligate wetland [OBL]), short woollyheads (*Psilocarphus brevissimus*; facultative wetland [FACW]), and American speedwell (*Veronica peregrina* ssp. *xalapensis*; facultative [FAC]). This feature is depicted on Figure 3.3-2.

FW WW-2 is composed of two disturbed, seasonally inundated depression areas primarily within a dirt access road and a swale near the central portion of the project site directly southeast of Swale (S) 2 (described further below).

FW WW-3 did not display an observable OHWM or bed and bank, instead displaying drainage patterns and surface soil cracks indicative of ponding within a depressional area, as well as a dark layer of a biotic crust. Wetland delineation data were collected within FW WW-3 to confirm the presence or absence of wetland parameters. FW WW-3 met the hydrophytic vegetation, hydric soil, and wetland hydrology parameters. This feature was dominated by short woollyheads (FACW) and smallseed sandmat (*Euphorbia polycarpa*; not listed/obligate upland [NL/UPL]). This feature is depicted on Figure 3.3-2.

Non-Wetland Waters of the United States

FW NWW-1A is a primarily vegetated and earthen-bottom channel. Specifically, the earthen-bottom channel enters the project site via a culvert outlet directly east of the airplane runway along the western portion of the project site and travels east-southeast for approximately 1,127 feet before entering two culvert inlets near the southern boundary of the project site. No associated riparian or wetland vegetation occurs beyond the banks of the channel. The artificial streambed area within the channel is dominated by non-native grassland plants such as musky stork's bill (*Erodium moschatum*; NL/UPL), Spanish clover (*Acmispon americanus*; UPL), and vinegarweed (*Trichostema lanceolatum*; UPL). This feature is depicted on Figure 3.3-2.

FW NWW-1B is located at the upstream extent of and entirely within the delineated OHWM of FW NWW-1A. Thus, OHWM data collected for FW NWW-1A dictate the extent of the OHWM within which FW NWW-1B occurs. FW NWW-1B is located adjacent to a culvert outlet and concrete apron structure directly east of the airplane runway along the western portion of the project site. The culvert outlet was constructed with a reverse fall condition that results in ponding of downstream flows on the concrete apron and contributes to the wetland conditions observed at FW NWW-1B. Wetland delineation data were collected within the primarily earthen bottom of FW NWW-1B to confirm the presence or absence of wetland parameters. This feature, which was dominated by horseweed (*Erigeron canadensis*; facultative upland [FACU]), American speedwell (FAC), and annual beard-grass (*Polypogon monspeliensis*; FACW), met the hydrophytic vegetation, hydric soil, and wetland hydrology parameters. This feature is depicted on Figure 3.3-2.

Waters of the State

The project site also supports potentially jurisdictional waters of the state regulated by Santa Ana RWQCB and CDFW, as depicted on Figure 3.3-3, Aquatic Resources, RWQCB, and on Figure 3.3-4, Aquatic Resources, CDFW.

Three features met the parameters for state wetland waters (SW WW) and one feature was identified as state non-wetland waters (SW NWW).² SW NWW-1 displayed various indicators of an OHWM, such as a change in vegetation species between the channel and adjacent uplands and an artificial bed and bank. SW NWW-1 did not meet the three wetland parameters; however, SW WW-1, SW WW-2, and SW WW-3 did meet the appropriate wetland parameters to qualify as wetland waters of the state. As such, SW NWW-1 would be considered non-wetland waters of the state based on the presence of an OHWM; SW WW-1, SW WW- 2, and SW WW-3 are expected to be considered wetland waters of the state given the presence of the three required wetland parameters and qualification as a wetland water of the state under Section II.3.c of the State Water Resources Control Board Procedures (SWRCB 2021). Approximately 0.34 acres (1,139 linear feet) of non-wetland waters of the state associated with SW NWW-1 and 0.11 acres (22 linear feet; associated with SW WW-1, which occurs within SW NWW-1) of wetland waters of the state associated with SW WW-1, SW WW-2, and SW WW-3 occur within the project site, as further detailed in Table 3.3.5. Linear footage was not calculated for SW WW-2 and SW WW-3 because these features are considered seasonally inundated depressions not associated with a linear riverine feature. More information about these features is provided in Appendix E to the BTR (Appendix D to this EIR).

These features are listed in Tables 3.3.5 and 3.3.6 and described further below. Within the project site, 0.34 acres (1,140 linear feet) of non-wetland waters of the state and 0.11 acres of wetland waters of the state under RWQCB jurisdiction and approximately 0.49 acres (1,162 linear feet) of vegetated streambed under CDFW jurisdiction were identified. These features are described further under “Wetland Waters of the State” and “Non-Wetland Waters of the State.”

Table 3.3-5. RWQCB-Jurisdictional Wetlands and Non-Wetland Waters on the Project Site

Aquatic Resource Name	Acres ^a	Linear Feet	Presence of OHWM/ Wetland	Estimated OHWM Width (Min–Max) (Linear Feet)	Cowardin Code	Dominant Vegetation	Location (Latitude, Longitude)
SW NWW-1	0.34	1,140	Yes/No	10–30	R6	Non-native grassland	33.876241, -117.248628
SW WW-1	0.01	22	Yes/Yes	13–18	R6	Non-native grassland	33.876558, -117.250668
SW WW-2	0.04	N/A ^b	No/Yes	7–21	PEM	Non-native grassland	33.876243, -117.250595
SW WW-3	0.07	N/A ^b	No/Yes	12–29	PEM	Non-native grassland	33.876932, -117.248469
Total	0.45	1,162	N/A	N/A	N/A	N/A	N/A

Source: Cowardin et al. 1979; Appendix D.

Notes: RWQCB = Regional Water Quality Control Board; OHWM = ordinary high water mark; SW = state waters; NWW = non-wetland waters; WW = wetland waters; N/A = not applicable.

^a Acreages rounded to the hundredths based on raw numbers provided during GIS analysis.

² The feature names in the associated figures for this section do not include “SW” (i.e., state waters) in front of the names because the applicable water resource agency is noted in the figure title.

b Where N/A, linear footage not calculated because the feature is considered a seasonally inundated depression not associated with a linear riverine feature.

Table 3.3-6. CDFW-Jurisdictional Streambeds on the Project Site

Aquatic Resource Name	Aquatic Resource Type	Width Range (Feet)	Acres ^a	Linear Feet	Dominant Vegetation	Location (Latitude, Longitude)
SW NWW-1	Vegetated streambed	15-35	0.49	1,162	Non-native grassland	33.876241, -117.248628
Total	N/A	N/A	0.49	1,162	N/A	N/A

Source: Appendix D.

Notes: CDFW = California Department of Fish and Wildlife; SW = state waters; NWW = non-wetland waters; N/A = not applicable.

^a Acreages rounded to the hundredths based on raw numbers provided during GIS analysis.

Wetland Waters of the State

The boundary for SW WW-1 is the same as the boundary defined for FW NWW-1B, described above.

The boundary for SW WW-2 is the same as the boundary defined for FW WW-1, described above.

The boundary for SW WW-3 is the same as the boundary defined for FW WW-2, described above.

Non-Wetland Waters of the State

The extent for SW NWW-1 is the same as the boundary defined for FW NWW-1A, described above.

Non-Jurisdictional Features

The project site also supports four potential ponding areas and four swales that are not expected to be regulated by USACE, RWQCB, or CDFW due to the lack of observable OHWM or bed and bank. A concrete-lined ditch, which is also considered non-jurisdictional due to the lack of observable OHWM, no longer appeared to convey flow and was filled with debris from adjacent uplands. These features are further described below and depicted in Figures 3.3-2 through 3.3-4.

Potential Ponding Areas 1-4

Several potential ponding areas occur within the project site that did not display an observable OHWM or bed and bank, and instead displayed slight drainage patterns indicative of a potential ponding area and some concavity within the otherwise flat landscape. A summary of each observed potential ponding area is provided below. These features are depicted in Figures 3.3-2 through 3.3-4.

Potential Ponding Area 1 (PPA-1) intersects the central portion of Swale 1 (S-1), which is described below and is located west of the airplane runway outside the project site. Wetland delineation data were collected within PPA-1 to confirm the presence or absence of wetland parameters. PPA-1 did not meet the hydrophytic vegetation, hydric soil, or wetland hydrology parameters. This feature is considered significantly disturbed due to routine mowing and is dominated by smallseed sandmat (NL/UPL) and goldfields (*Lasthenia* spp.; treated as FACU).

PPA-2 is located directly east of the airplane runway in the southwestern portion of the project site. Wetland delineation data were collected within PPA-2 to confirm the presence or absence of wetland parameters. PPA-2 met the wetland hydrology parameter but did not meet the hydrophytic vegetation or hydric soil parameters. This feature is dominated by red sandspurry (*Spergularia rubra*; FAC), vinegarweed (FACU), and doveweed (*Croton setiger*; NL/UPL).

PPA-3 is located west of Heacock Street in the southeastern portion of the project site. PPA-3 may have been created as a result of soil vapor extractions and soil remediation efforts that have subjected the surrounding area to soil removal and compacting activities. Wetland delineation data were collected within PPA-3 to confirm the presence or absence of wetland parameters. PPA-3 met the wetland hydrology parameter but did not meet the hydrophytic vegetation or hydric soil parameters. This feature is dominated by California aster (*Corethrogyne filaginifolia*; NL/UPL) and vinegarweed (FACU).

PPA-4 is located west of Heacock Street in the southeastern portion of the project site directly southeast of PPA-3. PPA-4 may have been created as a result of the routing of heavy equipment through the area for the purpose of conducting the various remediation and soil vapor extraction activities conducted in the area surrounding PPA-3. Wetland delineation data were collected within PPA-4 to confirm the presence or absence of wetland parameters. PPA-4 met the wetland hydrology and hydrophytic vegetation parameters but did not meet the hydric soil parameter. This feature is significantly disturbed due to previous soil compaction and removal resulting from heavy vehicle traffic and site construction. This feature is dominated by hyssop loosestrife (*Lythrum hyssopifolia*; OBL) and common spikeweed (*Centromadia pungens* ssp. *pungens*; FAC).

Swales 1-4

Several swales were observed during the field delineation that did not display an observable OHWM, bed and bank, or other evidence of conveying regular flows on site or from the runway areas. These disturbed swale features also did not appear to convey flows to downstream aquatic resources via observed flow patterns, culverts, or other flow paths. A summary of each observed swale is provided in the following paragraphs. These features are depicted in Figures 3.3-2 through 3.3-4.

S-1 is a concave drainage area located west of the airplane runway that enters through a culvert on the northwestern boundary of the project site and travels southwest for approximately 1,075 feet, intersecting with PPA-1 before eventually entering a culvert inlet near the western boundary of the project site. This feature did not meet the hydrophytic vegetation, hydric soil, or wetland hydrology parameters. This feature did not display OHWM indicators between the swale and the adjacent upland area. Thus, this swale was determined to not have an OHWM or defined bed and bank and is not considered a federal or state water.

S-2 is a disturbed drainage area that enters the project site at a culvert outlet located east of the airplane runway. The culvert outlet has silted up over time and currently requires at least 6 inches of ponding to flow beyond and over the adjacent perimeter road. Field observations confirmed that the swale no longer appears to connect with the channel and has been blocked off by a dirt access road. S-2 currently travels southeast from the culvert outlet for approximately 625 feet before entering FW WW-2 at its southeastern terminus. From the edge of the perimeter road, southeast 700+ linear feet, S-2 contains less than a 0.1% slope. This feature did not display OHWM indicators between the swale and the adjacent upland area. Thus, this swale was determined to not have an OHWM or defined bed and bank and is not considered a federal or state water.

S-3 is a drainage area located east of the airplane runway in the southwestern portion of the project site. S-3 did not display an observable OHWM or bed and bank and instead appeared to convey surface flows from airplane runoff. This feature did not display OHWM indicators between the swale and the adjacent upland area. Thus, this swale was determined to not have an OHWM or defined bed and bank and is not considered a federal or state water.

S-4 is an approximately 310-linear-foot concave drainage area that enters the project site at a culvert outlet in the southwestern portion of the site and trends northwest to southeast to its southeastern terminus at the project site boundary in the southwestern segment. The conditions and vegetation observed at S-1 were similar to and representative of S-4. Thus, S-4 was determined to not have an OHWM or defined bed and bank and is not considered a federal or state water.

Ditch 1

Ditch (D) 1 is a concrete-lined, artificially created ditch that occurs in the southern portion of the project site, initiating on site and traveling east to southwest for approximately 933 feet before entering two culvert outlets at the downstream extent of SW NWW-1. This feature is a V-ditch created in uplands in 2001 to intercept and convey flows into FW NWW-1A and away from the adjacent developed areas. D-1 is surrounded by non-native grassland and measures approximately 3 feet wide. This feature appeared to no longer convey flows and was filled with trash, debris, and eroded soils from the adjacent upland areas. D-1 did not appear to be functioning as an aquatic resource and is therefore not considered a federal or state water. This feature is depicted in Figures 3.3-2 through 3.3-4.

Wildlife Corridors

A wildlife corridor can be defined as a physical feature that links wildlife habitat, often consisting of native vegetation that joins two or more larger areas of similar wildlife habitat. Corridors enable migration, colonization, and genetic diversity through interbreeding and are therefore critical for the movement of animals and the continuation of viable populations. Corridors can consist of large, linear stretches of connected habitat (such as riparian vegetation) or a sequence of steppingstones across the landscape (discontinuous areas of habitat such as wetlands and ornamental vegetation), or corridors can be larger habitat areas with known or likely importance to local wildlife.

Regional corridors are defined as those linking two or more large patches of habitat, and local corridors are defined as those allowing resident animals to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development. A viable wildlife migration corridor consists of more than an unobstructed path between habitat areas. Appropriate vegetation communities must be present to provide food and cover for both transient species and resident populations of less-mobile animals. There must also be a sufficient lack of stressors and threats within and adjacent to the corridor for wildlife species to use it successfully.

The project site does not serve as a wildlife corridor because the areas surrounding the site are substantially developed. Undeveloped land to the north and west is composed of active land that is used by the airport and therefore supports substantial disturbance. This land has been fragmented by the uses of the airport and therefore would not likely serve as a wildlife corridor.

Nursery Sites

A nursery site refers to areas where native wildlife concentrates for hatching or rearing young. Nursery sites can include spawning areas, maternal roosts for bats, rookeries, monarch overwintering sites, and fawning areas for deer. The project site does not include habitat types that support nursery sites for native wildlife to spawn, roost, overwinter, or deliver young.

3.3.2 Relevant Plans, Policies, and Ordinances

This section identifies associated federal, state, and regional/local regulatory requirements applicable to the Proposed Project.

Federal

Federal Endangered Species Act

The federal ESA of 1973 (16 USC 1531 et seq.), as amended, provides for listing of endangered and threatened species of plants and designation of critical habitat for listed species. The ESA regulates the take of any endangered fish or wildlife species, per Section 9 of the ESA. “Take” is defined as follows: to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. As development is proposed, the responsible agency or individual landowner is required to consult with USFWS to assess potential impacts to any listed species (including plants) or its critical habitat, pursuant to Sections 7 and 10 of the ESA. USFWS is required to make a determination as to the extent of impact a project would have to a particular species. If it is determined that potential impacts to a species would likely occur, measures to avoid or reduce such impacts must be identified. USFWS may issue an incidental take statement, following consultation and the issuance of a Biological Opinion. This allows for take of the species that is incidental to another authorized activity, provided that the action will not adversely affect the existence of the species. Section 10 of the ESA provides for issuance of incidental take permits to non-federal parties with the development of a habitat conservation plan, and Section 7 provides for permitting of federal projects or projects requiring federal permits.

The regulatory requirements for the ESA can be found in Title 16 of the U.S. Code (USC), Section 1531 et seq., and 50 CFR, Part 402.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The extensive list of bird species covered by the Migratory Bird Treaty Act is found at 50 CFR, Part 10.13. The Migratory Bird Treaty Act is enforced by USFWS and prohibits “by any means or in any manner, to pursue, hunt, take, capture, [or] kill” any migratory bird, or attempt such actions, except as permitted by regulation.

Rivers and Harbors Act of 1899

The Rivers and Harbors Act of 1899 prohibits discharge of any material into navigable waters, or tributaries thereof, of the United States without a permit. The act also makes it a misdemeanor to excavate, fill, or alter the course, condition, or capacity of any port, harbor, or channel; or to dam navigable streams without a permit.

Many activities originally covered by the Rivers and Harbors Act are now regulated under the Clean Water Act (CWA) of 1972, discussed below. However, the 1899 Rivers and Harbors Act retains relevance and created the structure under which USACE oversees CWA Section 404 permitting.

Clean Water Act

Pursuant to Section 404 of the CWA, USACE is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the United States (including wetlands), which include those waters listed in 33 CFR, Part 328.3. USACE, with oversight from the U.S. Environmental Protection Agency, has the principal authority to issue CWA Section 404 permits.

A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The nine RWQCBs, divisions of the State Water Resources Control Board, provide oversight of the 401 permit process in California. The project site is located within the jurisdiction of the Santa Ana RWQCB (Region 8). Each RWQCB is required to provide “certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards.” Water Quality Certification must be based on the finding that proposed discharges will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System is the permitting program for discharge of pollutants into surface waters of the United States under Section 402 of the CWA. Substantial impacts to wetlands may require an Individual Permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits.

State

California Endangered Species Act and Natural Community Conservation Planning Act

CESA, in combination with the California Native Plant Protection Act of 1977, regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the state. California also lists species of special concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. CDFW is responsible for assessing development projects for their potential to impact listed species and their habitats. State-listed special-status species are addressed through the issuance of a 2081 permit (Memorandum of Understanding).

In 1991, the California Natural Community Conservation Planning (NCCP) Act was approved and the NCCP Coastal Sage Scrub program was initiated in Southern California. California law (Section 2800 et seq. of the California Fish and Game Code) established the NCCP program “to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth.” The NCCP Act encourages preparation of plans that address habitat conservation and management on an ecosystem basis rather than one species or habitat at a time.

California Fish and Game Code Sections 1600–1602

Pursuant to Division 2, Chapter 6, Section 1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake that supports fish or wildlife. A Lake or Streambed Alteration Agreement Application must be submitted to CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” CDFW has jurisdiction over riparian habitats associated with watercourses.

Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. CDFW reviews proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3511, 3513, 3800, 4700, 5050, and 5515

Within California, fish and wildlife are protected and managed by CDFW. The California Fish and Game Commission and/or CDFW are responsible for issuing permits for the take or possession of protected species. The following sections of the California Fish and Game Code address protected species: Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish). Additional protection for birds of prey is provided for in California Fish and Game Code Sections 3503, 3513, and 3800.

Porter-Cologne Water Quality Control Act

The California Porter-Cologne Water Quality Control Act (Porter-Cologne Act; California Water Code Section 13000 et seq.) provides for statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority, and nine separate RWQCBs were developed to oversee regional water quality on a day-to-day basis.

The Santa Ana RWQCB is the primary agency responsible for protecting water quality in the Santa Ana Region of California, which includes the project site. The Santa Ana RWQCB regulates discharges to surface waters under the federal CWA. In addition, the Santa Ana RWQCB is responsible for administering the Porter-Cologne Act.

Pursuant to the Porter-Cologne Act, the state is given authority to regulate “waters of the state,” which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 is not required for the activity. “Waste” is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

California Environmental Quality Act

CEQA requires state and local agencies to identify a project’s potentially significant impacts on biological resources and ways in which such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

CEQA Guidelines Section 15380(b)(1) defines endangered plants as species or subspecies whose “survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors.” A rare plant is defined in the CEQA Guidelines as a species that, although not presently threatened with extinction, exists “in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or ... [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered ‘threatened’ as that term is used in the federal Endangered Species Act” (14 CCR 15380[b][2]). In addition, an animal or plant species may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of “Special Plants” (and “Special Animals”) as “a broad term used to refer to all the plant [and animal] taxa inventoried by the Department of Fish and Wildlife’s California Natural Diversity Database (CNDDDB), regardless of their legal or protection status” (CDFW 2022a; see also CDFW 2022b). This is a broader list than those species that are protected under ESA, CESA, and other California Fish and Game Code provisions, and includes lists developed by other organizations, including, for example, the Audubon Watch List Species. Guidance documents prepared by other agencies, including the Bureau of Land Management Sensitive Species and USFWS Birds of Special Concern, are also included on these CDFW special species lists. In addition, CDFW has concluded that plant species listed as CRPR 1 and 2 by the California Native Plant Society, and potentially some CRPR 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G, Environmental Checklist Form, of the CEQA Guidelines requires an evaluation of impacts to “any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service.”

Regional/Local

Stephens’ Kangaroo Rat Habitat Conservation Plan

The Stephens’ Kangaroo Rat Habitat Conservation Plan (HCP) was completed in 1996 by the Riverside County Habitat Conservation Agency, CDFW, and USFWS (RCHCA 1996). The Stephens’ Kangaroo Rat HCP was created as a regional plan for species permitting and conservation so that individual projects could receive ESA take authority for the species throughout Riverside County, rather than individually. The Stephens’ Kangaroo Rat HCP established seven “core reserves,” totaling more than 41,000 acres, within a planning area of 533,000 acres. The Riverside County Habitat Conservation Agency is responsible for “completing” the reserves through the addition of land in fee simple or through the acquisition of easements. The Stephens’ Kangaroo Rat HCP also calls for the addition of 2,500 acres of occupied Stephens’ kangaroo rat habitat into the reserves, for a total acreage of occupied Stephens’ kangaroo rat habitat within core reserves of 15,000 acres (RCHCA 1996).

Under the Stephens’ Kangaroo Rat HCP, development within the HCP boundaries but outside the core reserves is deemed to fully mitigate for any impacts to Stephens’ kangaroo rat through compliance with the Stephens’ Kangaroo Rat HCP and the payment of a fee to the Riverside County Habitat Conservation Agency. March JPA is not a permittee to the Stephens’ Kangaroo Rat HCP; however, if a proposed project under March JPA oversight is anticipated to impact (include take of) Stephens’ kangaroo rat, the March JPA may contact the Riverside County Habitat Conservation Agency regarding obtaining a special agreement to participate in the Stephens’ Kangaroo Rat HCP, which would include payment of mitigation fees.

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County MSHCP is a habitat conservation plan pursuant to Section 10 of the federal ESA and is a Natural Community Conservation Plan under California’s NCCP Act of 2001. The MSHCP is a comprehensive, multi-jurisdictional habitat conservation plan focusing on the permanent conservation of 500,000 acres and the protection of 146 species, including 33 that are currently listed as threatened or endangered. For proposed projects subject to CEQA when the lead agency is also a signatory (Permittee) to the Western Riverside County MSHCP, the Permittee may convey take of its covered species to the project proponents. March JPA is the lead agency for the Proposed Project, but it is not a signatory to the Western Riverside County MSHCP. However, if needed, March JPA could seek take coverage through the MSHCP’s Participating Special Entity process and convey that take to the project applicant.

March JPA General Plan

As part of the March ARB realignment, the General Plan for the March JPA was created as a guiding tool for development within the former March Air Force Base (AFB). The General Plan is designed to implement the March AFB Master Reuse Plan, which included disposal and redevelopment of approximately 4,400 acres of the approximately 6,500 acres of the former March AFB. The General Plan serves as a blueprint for future growth and development (March JPA 1999a).

Resources Management Element

The Resource Management Element of the General Plan for the March JPA provides for the conservation, development, and use of natural, historical, and cultural resources. The Resource Management Element also details plans and measures for the preservation of open space designed to promote the management of natural resources, outdoor recreation, and public health and safety. This element identifies open space lands to include the golf course, installation restoration program cleanup sites, airfield- and aviation-related clear zones, riparian and open space habitat areas, and the expansion areas for the Riverside National Cemetery (March JPA 1999a).

The goals and policies relevant to biological resources and the Proposed Project from the Resource Management Element are provided below (March JPA 1999a).

Water Resources

Policy 1.1: Where possible, retain local drainage courses, channels and creeks in their natural condition.

Minimize Flood Hazards

Goal 5: Conserve and protect significant stands of mature trees, native vegetation, and habitat within the planning area.

Policy 5.1: Where practical, conserve important plant communities and habitats such as riparian areas, wetlands, significant tree stands, and species by using buffers, creative site planning, revegetation and open space easement/dedications.

Policy 5.2: Encourage the planting of native species of trees and other drought-tolerant vegetation.

Policy 5.4: In areas that may contain important plant and animal communities, require development to prepare biological assessments identifying species types and locations and develop measures to preserve recognized sensitive species, as appropriate.

Policy 5.5: Where practical, allow development to remove only the minimum natural vegetation and encourage the revegetation of graded areas with native plant species.

Consistency with all March JPA General Plan policies is also discussed in Section 3.10, Land Use and Planning, of this EIR.

3.3.3 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's impacts related to biological resources are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, where applicable, the March JPA CEQA Guidelines (March JPA 2022). For the purposes of the analysis in this EIR, a significant impact related to biological resources would occur if the Proposed Project would:

- BIO-1** Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- BIO-2** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- BIO-3** Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- BIO-4** 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.
- BIO-5** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- BIO-6** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.3.4 Impacts Analysis

Threshold BIO-1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less-Than-Significant Impact with Mitigation Incorporated.

Federally and/or State-Listed Endangered or Threatened Plant Species

No federally or state-listed plant species have been detected in the BSA, and no federally or state-listed plant species have moderate to high potential to occur within the BSA based on the lack of suitable habitat on site. As such, **no direct or indirect impacts** to federally or state-listed endangered or threatened plant species would occur.

Other Special-Status Plant Species

One CRPR 1B.1 species, smooth tarplant, had a moderate potential to occur within the BSA but was confirmed absent during protocol surveys. No other special-status species have a moderate or high potential to occur based on the lack of suitable habitat on site. As such, **no direct or indirect impacts** to special-status plant species would occur.

Federally and/or State-Listed Endangered or Threatened Wildlife Species

Riverside Fairy Shrimp and Vernal Pool Fairy Shrimp

Riverside fairy shrimp is federally listed as endangered and vernal pool fairy shrimp is federally listed as threatened. Riverside fairy shrimp and vernal pool fairy shrimp have a moderate and low-to-moderate potential to occur (respectively) within the project site based on the presence of potentially suitable habitat for these species. Protocol-level branchiopod presence/absence surveys were completed, and the negative results of these surveys were submitted to USFWS in accordance with species protocol. Riverside fairy shrimp and vernal pool fairy shrimp are considered absent from the project site; therefore, **no direct or indirect impacts** to these species would occur.

Stephens' Kangaroo Rat

Stephens' kangaroo rat has been documented in the vicinity of the project site. Suitable habitat is present within the project site; however, focused trapping surveys conducted for Stephens' kangaroo rat were negative. Therefore, **no direct or indirect impacts** to this species would occur.

Non-Listed Special-Status Wildlife Species

Two wildlife species of special concern, burrowing owl and San Diego black-tailed jackrabbit, have been documented within the project site. An additional species of special concern, California glossy snake, has a moderate potential to occur within the project site.

Burrowing Owl

Four burrowing owl individuals and sign (e.g., active burrow, whitewash, pellets) were observed during the 2020 and 2021 biological surveys, and suitable foraging and nesting habitat (burrows) occur on site. If the project site remains occupied by breeding burrowing owls, direct impacts could occur in the form of habitat destruction, and potentially death, injury, or harassment of nesting birds, their eggs, and their young. Injury or mortality occurs most frequently during the vegetation-clearing stage of construction and affects eggs, nestlings, and recently fledged young that cannot safely avoid equipment or construction activities that cause adults to abandon a burrow with eggs or nestlings. Direct impacts to burrowing owl could result from ground-disturbing activities (e.g., clearing, grubbing, grading), and would be considered significant without mitigation. Indirect short-term impacts to burrowing owl include vibration, excess noise, chemical pollution, fugitive dust, and increased human presence, and substantial long-term impacts include chemical pollution and increased human presence. Indirect short-term and long-term impacts to burrowing owl would also be considered significant without mitigation.

Potential impacts on burrowing owl were identified in the Master EIR for the March JPA General Plan (March JPA 1999b), and Proposed Project impacts on burrowing owl would be **potentially significant**. Direct and/or indirect impacts to burrowing owl would be reduced by implementation of **Mitigation Measure (MM) BIO-1A**

(Burrowing Owl Avoidance and Minimization Measures; refer to Section 3.3.5 for biological resources mitigation measures). This mitigation measure requires pre-construction surveys, establishment of exclusion (avoidance) buffers around occupied burrows or burrow complexes (buffer width is dependent upon breeding versus non-breeding season), and burrowing-owl-specific monitoring throughout construction to ensure full avoidance of owls.

Should it be determined that full avoidance of occupied burrowing owl burrows or burrow complexes is not possible, **MM-BIO-1B** (Burrowing Owl Relocation and Mitigation Plan) requires preparation of a Burrowing Owl Relocation and Mitigation Plan that would include methods for passive relocation; description of surrounding suitable habitat conditions; monitoring and management requirements for replacement burrow sites in coordination with CDFW; reporting requirements; and compensatory mitigation, if required by CDFW.

In addition, burrowing owls would also indirectly benefit from implementation of **MM-BIO-2** (Best Management Practices), which requires clear marking of work limits; restricting vehicle speed limits to 15 mph or slower to minimize the generation of fugitive dust; pet restrictions; measures to ensure that trash and debris are disposed of properly; and native, non-invasive landscaping to minimize the spread of non-native invasive plant and animal species. Implementation of **MM-BIO-1A**, **MM-BIO-1B**, and **MM-BIO-2** would reduce direct and indirect impacts to burrowing owl. Therefore, impacts to burrowing owl would be **less than significant with mitigation incorporated**.

San Diego Black-Tailed Jackrabbit

San Diego black-tailed jackrabbit is a highly mobile species, and it would be expected that most individuals would naturally leave the project site during the commencement of Proposed Project activities. However, direct impacts to San Diego black-tailed jackrabbit could result from ground-disturbing activities (e.g., clearing, grubbing, grading), and would be considered significant without mitigation. Indirect short-term impacts to San Diego black-tailed jackrabbit include vibration, chemical pollution, fugitive dust, and increased human presence, and substantial long-term impacts include chemical pollution and increased human presence. Indirect short-term and long-term impacts to San Diego black-tailed jackrabbit would also be considered significant without mitigation.

Direct and indirect impacts to occupied San Diego black-tailed jackrabbit habitat would be reduced by implementation of **MM-BIO-3** (San Diego Black-Tailed Jackrabbit Avoidance and Minimization Measures), which requires a pre-construction survey to be conducted 30 days prior to ground-disturbing activities, the demarcation and avoidance of active maternity dens during the pup-rearing season (February 15 through July 1), and monitoring by a biological monitor during all ground disturbance and construction activities to ensure that avoidance is implemented. A qualified biologist will flush adult San Diego black-tailed jackrabbits out of the impact area and relocate unattended young to suitable habitat (only in coordination with CDFW) and document all identified, avoided, and relocated San Diego black-tailed jackrabbit in a written report to CDFW within 72 hours. In addition, implementation of **MM-BIO-2** (Best Management Practices), which requires daily biological monitoring during vegetation clearing and ground disturbance that results in breaking the ground surface; clearly marking work limits; restricting vehicle speed limits to 15 mph or slower to minimize the generation of fugitive dust; pet restrictions; measures to ensure that trash and debris are disposed of properly; and native, non-invasive landscaping to minimize the spread of non-native invasive plant and animal species, would further reduce potential indirect impacts to San Diego black-tailed jackrabbit and its habitat. Implementation of **MM-BIO-2** and **MM-BIO-3** would reduce direct and indirect impacts to San Diego black-tailed jackrabbit. Therefore, impacts to black-tailed jackrabbit would be **less than significant with mitigation incorporated**.

California Glossy Snake

California glossy snake is typically found associated with arid scrub, rocky washes, grasslands, and chaparral habitats. The loss of approximately 66 acres of non-native grasslands that is potential suitable for California glossy snake could lead to direct and indirect impacts to the species. Direct impacts to California glossy snake could result from ground-disturbing activities (e.g., clearing, grubbing, grading), and would be considered significant without mitigation. Indirect short-term impacts to California glossy snake could occur from vibration, chemical pollution, fugitive dust, and increased human presence. Long-term impacts could occur from chemical pollution and increased human presence. Indirect short-term and long-term impacts to California glossy snake would be considered significant without mitigation.

Direct and/or indirect impacts to potentially occupied California glossy snake habitat would be reduced by implementation of **MM-BIO-2** (Best Management Practices), which requires a daily biological monitor (during vegetation clearing and ground disturbance that results in breaking the ground surface) to flush special-status species (including California glossy snake) from suitable habitat prior to initial vegetation-removal activities to suitable habitat off site to ensure that avoidance is implemented. In addition, in order to avoid and minimize indirect impacts to California glossy snake, **MM-BIO-2** restricts vehicle speed limits to 15 mph or slower to minimize the generation of fugitive dust; provides pet restrictions; provides measures to ensure that trash and debris are disposed of properly to minimize short-term impacts of increased human activities; and requires incorporation of native, non-invasive landscaping to minimize the spread of non-native invasive plant and animal species.

As part of the March AFB closure and redevelopment process, 664 acres of lands were placed into a conservation easement to offset species and habitat losses associated with the March AFB Master Reuse Plan (March JPA 1999a), including redevelopment of the project site. As such, many habitat and species losses have already been addressed through conservation of the 664 acres of lands. According to the Center for Natural Lands Management's Stephens' Kangaroo Rat Monitoring Report (CNLM 2012), the Stephens' Kangaroo Rat HCP preserve lands are "dominated by non-native grasslands." Although not set aside specifically as mitigation for glossy snake, the 664 acres does include similarly suitable habitats for California glossy snake.

Therefore, implementation of **MM-BIO-2** would reduce direct and indirect impacts to California glossy snake to **less than significant with mitigation incorporated**.

Nesting Birds

The project site has the potential to support bird nests, which would be protected under the Migratory Bird Treaty Act and/or the California Fish and Game Code (Section 3503), under which it is unlawful to "take, possess, or needlessly destroy" bird nests or eggs. Thus, potentially significant impacts could occur if vegetation clearing is undertaken during the breeding season (February 1 through September 15). Removal of habitat would occur outside the breeding season. Adult birds, including the California horned lark (a Watch List species), would likely flush during initial Proposed Project activities. If vegetation removal cannot occur outside the breeding season, **MM-BIO-4** (Nesting Bird Avoidance and Minimization Measures) would be implemented to require a pre-construction nesting bird survey, implementation of exclusion (avoidance) buffers, and biological monitoring to ensure that the nest is no longer active prior to the removal of the exclusion buffers, thus addressing direct and indirect impacts to nesting birds. Therefore, impacts to nesting birds would be **less than significant with mitigation incorporated**.

Threshold BIO-2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less-Than-Significant Impact with Mitigation Incorporated. The Proposed Project would occur primarily within periodically mowed non-native grasslands (Table 3.3-1 and Figure 3.3-5, Impacts to Biological Resources). In addition, although non-native grassland on the project site (32.2 acres) is not a native community, it may provide foraging habitat for raptor species known to occur in the region. However, no special-status raptor species were observed during field observation and no special-status raptors were identified as having a potential to occur on the project site, as described in Table 3.3-3. Impacts to nonnative grassland would be less than significant.

One native habitat present within the project site is Goodding's willow-red willow riparian woodland and forest (*Salix gooddingii*). Goodding's willow-red willow riparian woodland and forest is a native community that is uncommon, but not rare, and has declined in the region due to development. This habitat exists in one small stand along the southern project site boundary and is bordered by developed land. Goodding's willow-red willow riparian woodland and forest is a sensitive community under CEQA. Implementation of **MM-BIO-5** (Jurisdictional Waters Permitting and Regulatory Agency Permitting) would provide compensatory mitigation for impacts to 0.02 acres of Goodding's willow-red willow riparian woodland and forest, as described under Threshold BIO-3. With the requirement for compensatory mitigation and implementation of **MM-BIO-5**, direct and indirect impacts would be **less than significant with mitigation incorporated**.

Threshold BIO-3: Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less-Than-Significant Impact with Mitigation Incorporated. The Proposed Project anticipates permanent impacts to 0.35 acres (1,162 linear feet) of non-wetland waters of the United States and 0.10 acres of wetland waters of the United States under USACE jurisdiction; 0.34 acres of non-wetland waters of the state (1,130 linear feet) and 0.11 acres (22 linear feet) of wetland waters of the state under RWQCB jurisdiction; and 0.49 acres (1,162 linear feet) of vegetated streambed under CDFW jurisdiction, as shown in Figure 3.3-6, Impacts to Aquatic Resources, USACE; Figure 3.3-7, Impacts to Aquatic Resources, RWQCB; and Figure 3.3-8, Impacts to Aquatic Resources, CDFW. Direct impacts could result from ground-disturbing activities (e.g., clearing, grubbing, grading), and would be considered significant without mitigation. Indirect short-term impacts to jurisdictional waters include changes to hydrology, erosion, chemical pollution, and fugitive dust, and substantial long-term impacts include hydrology alterations and chemical pollution. Indirect impacts to jurisdictional waters would be significant without mitigation.

Impacts to aquatic resources requires permitting through USACE under Section 404 of the CWA, through RWQCB under Section 401 of the CWA, and through CDFW under Section 1602 of the California Fish and Game Code. To ensure compliance with the CWA, Section 404 authorization from USACE will be required, along with a Section 401 Water Quality Certification from the RWQCB and a Streambed Alteration Agreement from CDFW to ensure compliance with California Fish and Game Code Section 1602. Compliance with these regulatory permits would result in implementation of mitigation and other conditions that would be reasonably expected to address any adverse direct and/or indirect impacts.

Direct and indirect impacts to aquatic resources would be addressed with implementation of **MM-BIO-5** (Jurisdictional Waters Permitting and Regulatory Agency Permitting), which calls for mitigation through the purchase of reestablishment credits at not less than a 1:1 ratio from a mitigation bank (e.g., Riverpark Mitigation Bank) or as otherwise determined through consultation with USACE, RWQCB, and CDFW. Note that these aquatic resources agencies may require additional credits (e.g., different type of credits and/or a higher mitigation ratio). Pursuant to CEQA Guidelines Section 15126.4(a)(1)(B), “Compliance with a regulatory permit or other similar process in coordination with these agencies may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards.” According to USACE, approved compensatory mitigation emphasizes a watershed approach and requires enforceable ecological performance standards and long-term protection (73 FR 19594-19702). The impacted aquatic resources within the project site have lower ecological value than enhanced or reestablished aquatic resource habitat that, when provided as mitigation, will contribute to a larger, landscape-level aquatic feature that can facilitate higher-quality beneficial uses than the impacted features within the project site. Because of the regulations stipulated for compensatory migration by USACE, the purchase of mitigation lands is expected to offset Proposed Project impacts because the mitigation lands would contain higher-quality aquatic resources than those present within the project site. **MM-BIO-5** requires that applicable resource agency permits be received prior to implementation of the Proposed Project and that mitigation for impacts to those resources be secured prior to ground disturbance. In addition, the best management practices outlined in **MM-BIO-5** require that equipment and spoil sites not be placed within or adjacent to aquatic resources, and that pollutants be contained so that they cannot contaminate soil or waterways. Therefore, impacts to aquatic resources (waters of the United States and waters of the state) would be **less than significant with mitigation incorporated**.

Threshold BIO-4: Would the project 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?

Less-Than-Significant Impact. The project site is located adjacent to developed and open space areas, but much of the vicinity is developed or experiences severe natural disturbance via use as an airstrip. Wildlife may move through the project site on a local level, but the project site and the area around it do not provide regional habitat connectivity between large open space areas and do not provide any native wildlife nursery sites. Therefore, the Proposed Project would not impact wildlife corridors or impede the use of nursery sites. Impacts would be **less than significant**.

Threshold BIO-5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less-Than-Significant Impact with Mitigation Incorporated.

March JPA General Plan Resource Management Element

The March JPA General Plan Resource Management Element provides for the conservation, development, and use of natural resources. The Resource Management Element also details plans and measures for the preservation of open space designed to promote the management of natural resources, as follows (March JPA 1999a):

Policy 1.1: Where possible, retain local drainage courses, channels and creeks in their natural condition.

Policy 2.6: Open channels shall be encouraged, as appropriate, to maintain or enhance riparian habitat areas.

The Proposed Project would impact aquatic resources, which would be considered natural resources under the March JPA General Plan Resource Management Element. Implementation of **MM-BIO-5** (Jurisdictional Waters Permitting and Regulatory Agency Permitting) would reduce impacts to less than significant.

Goal 5: Conserve and protect- significant stands of mature trees, native vegetation, and habitat within the planning area.

Policy 5.1: Where practical, conserve important plant communities and habitats such as riparian areas, wetlands, significant tree stands, and species by using buffers, creative site planning, revegetation and open space easement/dedications.

Impacts to 0.02 acres of Goodding’s willow–red willow riparian woodland and forest and 0.10 acres of wetland waters of the United States would be mitigated to a less-than-significant level through implementation of **MM-BIO-5**, which requires compensatory mitigation for impacts to Goodding’s willow–red willow riparian woodland and forest and wetland waters. No other riparian areas, wetlands, significant tree stands, or sensitive species are present.

Policy 5.4: In areas that may contain important plant and animal communities, require development to prepare biological assessments identifying species types and locations and develop measures to preserve recognized sensitive species, as appropriate.

The BTR developed for the Proposed Project identified plant and wildlife species present or with the potential to be present within the project site, along with measures to mitigate the Proposed Project’s potential impacts to those species (Appendix D) to less than significant.

Policy 5.5: Where practical, allow development to remove only the minimum natural vegetation and encourage the revegetation of graded areas with native plant species.

The Proposed Project would impact 0.02 acres of Goodding's willow-red willow riparian woodland and forest but will mitigate for this loss through implementation of **MM-BIO-5**, which requires compensatory mitigation for impacts to Goodding's willow-red willow riparian woodland and forest and would result in less-than-significant impacts.

Policy 5.6: Work with state, federal and local agencies in the preservation and/or mitigation of recognized sensitive vegetation and wildlife in March JPA Planning Area.

Potential impacts on sensitive wildlife and associated habitats were addressed as part of the March AFB closure USFWS Section 7 consultation (Biological Opinion 1-6-99-F-13) and subsequent *Center of Biological Diversity v. Jim Bartel et al.* Settlement Agreement (S.D. Cal. No. 09-cv-1854-JAH-POR). Related impacts would be less than significant.

As such, impacts to biological resources relative to the March JPA General Plan would be **less than significant with mitigation incorporated**.

Threshold BIO-6: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less-Than-Significant Impact with Mitigation Incorporated.

Western Riverside County Multiple Species Habitat Conservation Area

The project site falls within the boundaries of the MSHCP. March JPA is not a Permittee in the MSHCP, nor is it required to be consistent with the MSHCP. However, for the purposes of CEQA, a project must also demonstrate that it will not conflict with any the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Regional Conservation Authority MSHCP Information Map (RCA 2021) was reviewed for requirements that could result in a potential conflict between the Proposed Project and the MSHCP. The project site is not located within a Criteria Cell and therefore is not subject to MSHCP Reserve Assembly requirements or conservation of lands. The Proposed Project will not interfere with existing conservation or other lands described for conservation.

The Proposed Project is not located within a habitat assessment area for narrow endemic plant species, criteria area species, mammals, or amphibians (RCA 2021). However, the Proposed Project is located within a burrowing owl habitat assessment area. Focused surveys for the Proposed Project confirmed that burrowing owl are present within the project site; therefore, the applicant will implement **MM-BIO-1A** (Burrowing Owl Avoidance and Minimization Measures), **MM-BIO-1B** (Burrowing Owl Relocation and Mitigation Plan), and **MM-BIO-2** (Best Management Practices) to avoid and minimize direct and indirect impacts to burrowing owl (refer to Section 3.3.5 for the text of these mitigation measures). Furthermore, MSHCP Section 6.1.2 protects riparian/riverine and vernal pool resources (RCA 2003). The project site does not contain vernal pools, but it does contain depressions suitable for listed fairy shrimp species, including Riverside fairy shrimp, Santa Rosa fairy shrimp (*Linderiella santarosae*), and vernal pool fairy shrimp. Protocol wet and dry season fairy shrimp survey results were negative, and listed fairy shrimp species were confirmed absent. The Proposed Project would impact 0.02 acres of Goodding's willow that was formed from artificial runoff and does not have potential to support Section 6.1.2 species, including least Bell's vireo (*Vireo bellii pusillus*), southwestern

willow flycatcher (*Empidonax traillii extimus*), and yellow-billed cuckoo (*Coccyzus americanus*). As such, this community is not considered an MSHCP riparian/riverine resource. Within the project site, the Proposed Project would impact jurisdictional aquatic resources that would be considered MSHCP riparian/riverine resources and could be considered significant. However, implementation of **MM-BIO-5** (Jurisdictional Waters Permitting and Regulatory Agency Permitting) would reduce impacts to jurisdictional aquatic resources, including MSHCP riparian/riverine resources, to less than significant.

Although March JPA is not a Permittee in the MSHCP and is not required to be consistent with the MSHCP, with implementation of the mitigation specified above, the Proposed Project would not conflict with the provisions of the MSHCP. Because there would be no conflicts with the MSHCP as result of the Proposed Project, impacts would be **less than significant with mitigation incorporated**.

Stephens' Kangaroo Rat Habitat Conservation Plan

The project site is physically located within the Stephens' Kangaroo Rat HCP area (RCHCA 1996). However, March JPA is not a member agency in the HCP, and Stephens' kangaroo rat is not present on the project site based on the negative results of the protocol surveys conducted on the site. Although March JPA is not a Permittee in the HCP and is not required to be consistent with the HCP, the Proposed Project is not in conflict with the provisions of the Stephens' Kangaroo Rat HCP. Because there would be no conflicts with the Stephens' Kangaroo Rat HCP as a result of the Proposed Project, **no impacts** would occur.

3.3.5 Mitigation Measures

The following mitigation measures would be implemented to reduce potentially significant impacts to biological resources from implementation of the Proposed Project:

MM-BIO-1A Burrowing Owl Avoidance and Minimization Measures. Prior to the initiation of ground disturbance, a qualified biologist shall conduct pre-construction surveys for burrowing owl to determine presence/absence of the species. The survey shall be conducted in accordance with the most current and applicable California Department of Fish and Wildlife (CDFW) protocol within 30 days of site disturbance. If burrowing owls are not detected during the clearance survey, no additional mitigation is required. Pre-construction surveys shall include suitable burrowing owl habitat within the project footprint and within 500 feet of the project footprint (or within an appropriate buffer as required in the most recent guidelines and where legal access to conduct the survey exists). If burrowing owls are not detected during the clearance survey, no additional mitigation is required.

If burrowing owl is detected, occupied burrowing owl burrows shall not be disturbed during the breeding season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through non-invasive methods that either the birds have not begun egg laying and incubation, or that juveniles from the occurred burrows are foraging independently and capable of independent survival. Disturbance buffers shall be implemented by a qualified biologist in accordance with the recommendations within CDFW's 2012 Staff Report on Burrowing Owl Mitigation and in coordination with CDFW. A biologist shall be contracted to perform monitoring approximately every other day during all ground disturbance and construction activities. The definitive frequency and duration of monitoring shall be dependent on whether it is the breeding season or the non-breeding season and the efficacy of the exclusion buffers, as determined by a qualified biologist and in coordination with CDFW.

If burrowing owl is detected during the non-breeding season (September 1 through January 31) or confirmed to not be nesting, a non-disturbance buffer between Proposed Project activities and the occupied burrow shall be installed by a qualified biologist in accordance with the recommendations in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and in coordination with CDFW. The project applicant shall submit at least one burrowing owl pre-construction survey report to the satisfaction of the March Joint Powers Authority and CDFW to document compliance with this mitigation measure. For the purposes of this mitigation measure, a "qualified biologist" is a biologist who meets the requirements set forth in the CDFW 2012 Staff Report on Burrowing Owl Mitigation.

MM-BIO-1B Burrowing Owl Relocation and Mitigation Plan. If burrowing owls are identified within the project site, a Burrowing Owl Relocation and Mitigation Plan (Plan) shall be prepared and submitted for approval by the California Department of Fish and Wildlife (CDFW). Any passive or active relocation shall only occur outside the burrowing owl breeding season. Once the Plan is approved, any passive or active relocation of non-breeding burrowing owls from the project site shall be implemented by a qualified biologist. The Plan shall detail methods and guidance for passive or active relocation of burrowing owls from the project site, as well as any proposed mitigation (e.g., replacement habitat, creation of artificial burrows, identification of conservation lands, or as otherwise described in the CDFW 2012 Staff Report on Burrowing Owl Mitigation). The Plan will also provide a description of surrounding suitable habitat conditions; describe any monitoring (if passive relocation is implemented); locate a receiver site and assess the conditions for burrowing owl suitability (if active relocation is implemented) followed by burrowing owl relocation activity details, and implement monitoring and management of relocated owls on the receiver site; and describe reporting requirements. Additional compensatory mitigation may also be required by CDFW if occupied burrows or territories occur within the permanent impact footprint. In coordination with CDFW, any additional compensation may include off-site enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. Off-site mitigation may also require long-term protection through a conservation easement or other protective measure. Compensatory mitigation shall also be detailed in the Burrowing Owl Relocation and Mitigation Plan.

MM-BIO-2 Best Management Practices. To avoid impacts to special-status resources and inadvertent disturbance to areas outside the project construction limits, the following monitoring requirements and best management practices (BMPs) shall be implemented:

1. A biologist shall be contracted to perform daily monitoring during initial vegetation removal and throughout ground-disturbing activities that result in the breaking of the ground surface. After initial vegetation removal and ground disturbance that results in breaking of the ground surface, a biologist shall be contracted to perform regular random checks (not less than once per week but the frequency could be increased depending on the presence of special-status species) to ensure that all mitigation measures and BMPs are implemented. In addition, monitoring reports and a post-construction monitoring report shall be prepared to document compliance with these mitigation measures and BMPs and submitted to the March Joint Powers Authority (JPA).
2. To prevent inadvertent disturbance to areas outside the limits of work, the construction limits shall be clearly demarcated (e.g., installation of flagging or temporary visibility construction fence) prior to ground-disturbing activities, and all construction activities, including equipment

staging and maintenance, shall be conducted within the marked disturbance limits. The work limit delineation shall be maintained throughout project construction. Should construction fencing be installed to delineate the limits of work, adequate openings along the northern and western perimeters shall be established to allow for dispersal of wildlife into the adjacent undeveloped lands. The contractor shall consult with the biological monitor to confirm that construction fencing will prevent unauthorized access beyond the limits of work while allowing wildlife to escape from active construction areas.

3. A biologist shall flush special-status species (i.e., avian or other mobile species) from suitable habitat areas immediately prior to initial vegetation removal activities.
4. Construction vehicles shall not exceed 15 mph on unpaved roads adjacent to the project site or the right-of-way accessing the site.
5. If trash and debris need to be stored overnight during construction activities, fully covered trash receptacles that are animal proof and weather proof shall be used by the contractor to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Alternatively, standard trash receptacles may be used during the day, but must be removed each night.
6. Temporary structures and storage of construction materials shall not be located in jurisdictional waters, including wetlands or riparian areas.
7. Staging/storage areas for construction equipment and materials shall not be located in jurisdictional waters, including wetland or riparian areas.
8. The operator shall not permit pets on or adjacent to construction sites.
9. As per the Landscaping Guidelines of the Resource Management Element of the 1999 March JPA General Plan, drought-tolerant vegetation and native vegetation shall be used, consistent with March JPA Landscape Water Efficiency Ordinance No. JPA 16-03, with the purpose of preserving existing native vegetation, as applicable. A qualified botanist shall review landscape plans to recommend appropriate provisions to minimize the spread of invasive plant species, as listed by the California Invasive Plant Council (www.cal-ipc.org) and California Native Plant Society (www.cnps.org), within the project site. Provisions may include installation of container plants and/or hydro-seeding areas adjacent to existing, undisturbed native vegetation areas with native plant species that are common within temporary impact areas, and review and screening of proposed plants to identify and avoid potential invasive species and weed removal during the initial planting of landscaped areas. Species used in landscaping shall not include trees that would attract raptor or other large avian species, thus potentially facilitating increased risk of aircraft/bird strikes.
10. To avoid the creation of wildlife attractants that could pose risks to aircraft operations and to comply with the Airport Land Use Compatibility Plan for March Air Reserve Base, landscape plans shall be reviewed by a Federal Aviation Administration-Qualified Airport Wildlife Biologist.

MM-BIO-3 San Diego Black-Tailed Jackrabbit Avoidance and Minimization Measures. Thirty days prior to ground-disturbing activities, a qualified biologist shall conduct a survey within the proposed disturbance zone and within 200 feet of the disturbance zone for San Diego black-tailed jackrabbit. If San Diego black-tailed jackrabbits are present, non-breeding rabbits shall be flushed from areas to be disturbed. Dens, depressions, nests, or burrows occupied by pups shall be flagged and ground-disturbing activities shall be avoided within a minimum of 200 feet during the pup-rearing

season (February 15 through July 1). This buffer may be reduced based on the location of the den upon consultation with the California Department of Fish and Wildlife (CDFW). Occupied maternity dens, depressions, nests, and burrows shall be flagged for avoidance. A biologist shall be contracted to perform daily monitoring during initial vegetation removal and throughout ground-disturbing activities that result in the breaking of the ground surface, as further described in **MM-BIO-2**. If construction fencing is installed, the contractor shall establish adequate openings within the northern and western fence perimeters to allow for passive dispersal into adjacent undeveloped lands during construction. Fence openings will not include openings that direct wildlife to existing aircraft operations. If unattended young are discovered, they shall be relocated to suitable habitat by a qualified biologist. The biologist shall document all San Diego black-tailed jackrabbits identified, avoided, and/or moved, and provide a written report to CDFW within 72 hours. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits, and only in consultation with CDFW.

MM-BIO-4 Nesting Bird Avoidance and Minimization Measures. To avoid direct impacts to raptors and/or native/migratory birds (including California horned lark), vegetation removal and grading activities should occur outside the breeding season (February 1 through September 15) for these species. If removal of habitat in the proposed area of disturbance must occur during the breeding season (September 16 through January 31), a qualified biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-construction survey shall be conducted within 3 calendar days prior to the start of ground disturbance (including removal of vegetation).

If an active nest is found, a qualified avian biologist shall alert the Operations Manager or Wildlife Hazard Manager at March Air Reserve Base to the presence of the nest to determine whether the nest poses risks to aircraft operations. The biologist shall establish an exclusion buffer, with the established buffer width being dependent on preventing all disruption of nesting behavior and nest activity. All active nests shall be monitored throughout construction, at a frequency determined by a qualified biologist, until ground disturbance and construction activities are concluded or the nest is no longer active, whichever occurs first. The biological monitor shall exercise caution to minimize disturbance to the nest. Photographs and other documentation shall be conducted away from the nest to prevent disturbance. Geographic information system (GIS) points shall be taken at/near the active nest only to the extent that the nest will not be disturbed, and nesting behavior will not be disrupted.

MM-BIO-5 Jurisdictional Waters Permitting and Regulatory Agency Permitting. The project site supports aquatic resources that are considered jurisdictional under the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). Prior to ground disturbance, the project applicant shall coordinate with the USACE, Los Angeles District, to assure conformance with the requirements of Section 404 of the Clean Water Act and with the Santa Ana RWQCB (Region 8) to ensure conformance with the requirements of Section 404/401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Prior to activity within CDFW-jurisdictional streambed or associated riparian or wetland habitat, the project applicant shall coordinate with CDFW (Eastern Sierra and Inland Desert Region 6) relative to conformance to the Lake and Streambed Alteration permit requirements.

The Proposed Project shall mitigate at not less than 1:1 with reestablishment credits (0.45 acres USACE/0.45 acres RWQCB/0.49 acres CDFW) for impacts to aquatic resources as part of an overall strategy to ensure no net loss. Mitigation shall be completed through use of a mitigation bank or other applicant-sponsored mitigation. Final mitigation ratios and credits shall be determined through consultation with USACE, RWQCB, and/or CDFW based on agency evaluation of current resource functions and values and through each aquatic resource agency's respective permitting process.

Should applicant-sponsored mitigation be implemented, a Habitat Mitigation and Monitoring Plan shall be prepared in accordance with State Water Resources Control Board guidelines and approved by the agencies in accordance with the proposed program permits. The Habitat Mitigation and Monitoring Plan shall include a conceptual planting plan, including planting zones, grading, and irrigation, as applicable; a conceptual plant palette; weeding practices; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity. Any off-site applicant-sponsored mitigation shall be located a minimum of 10,000 feet away from the project site in order to avoid creating new wildlife attractants near the airfield.

Best management practices shall be implemented to avoid any indirect impacts to jurisdictional waters, as follows:

1. Vehicles and equipment shall not be operated in ponded or flowing water except as described in permits.
2. Water containing mud, silt, or other pollutants from grading or other activities shall not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows.
3. Spoil sites shall not be located within 30 feet from the boundaries of jurisdictional waters or in locations that may be subject to high storm flows where spoils might be washed back into drainages.
4. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources resulting from Proposed Project-related activities shall be prevented from contaminating the soil and/or entering avoided jurisdictional waters.
5. No equipment maintenance shall be performed within 100 feet of jurisdictional waters, including wetlands and riparian areas, where petroleum products or other pollutants from the equipment may enter these areas. Fueling of equipment shall not occur on the project site.

3.3.6 Level of Significance after Mitigation

Burrowing owl, considered a species of special concern by CDFW, has been documented within the project site. Ground disturbance associated with the Proposed Project could cause direct impacts to occupied burrows used by the species or indirect impacts due to adults abandoning their eggs or nestlings. **MM-BIO-1A** (Burrowing Owl Avoidance and Minimization Measures) requires pre-construction surveys and buffers for occupied burrows and monitoring during ground-disturbing activities to ensure complete avoidance. **MM-BIO-1B** (Burrowing Owl Relocation and Mitigation Plan) requires the preparation of a Burrowing Owl Relocation and Mitigation Plan and habitat

compensation for the loss of occupied habitat. **MM-BIO-2** (Best Management Practices) requires biological monitoring; clearly marking work limits; restricting vehicle speed limits to 15 mph or slower to minimize the generation of fugitive dust; pet restrictions; measures to ensure that trash and debris are disposed of properly to minimize short-term impacts of increased human activities; and incorporation of native, non-invasive landscaping to minimize the spread of non-native invasive plant and animal species. Potential direct and indirect impacts to burrowing owl would be **less than significant with mitigation incorporated (MM-BIO-1A, MM-BIO-1B, and MM-BIO-2)**.

San Diego black-tailed jackrabbit, considered a species of special concern by CDFW, has been documented within the project site. Ground disturbance associated with the Proposed Project could cause direct impacts to individuals and young. **MM-BIO-3** (San Diego Black-Tailed Jackrabbit Avoidance and Minimization Measures) requires a pre-construction survey to be conducted 30 days prior to ground-disturbing activities and the demarcation and avoidance of active maternity dens during the pup-rearing season (February 15 through July 1). **MM-BIO-2** requires biological monitoring during vegetation clearing and ground disturbance that results in breaking the ground surface; clearly marking work limits; restriction of vehicle speed limits to 15 mph or slower to minimize the generation of fugitive dust; pet restrictions; measures to ensure that trash and debris are disposed of properly to minimize short-term impacts of increased human activities; and incorporation of native, non-invasive landscaping to minimize the spread of non-native invasive plant and animal species. These measures would reduce potential indirect impacts to San Diego black-tailed jackrabbit. Potential direct and indirect impacts to San Diego black-tailed jackrabbit would be **less than significant with mitigation incorporated (MM-BIO-2 and MM-BIO-3)**.

California glossy snake, considered a species of special concern by CDFW, has a moderate potential to occur within the project site. Ground disturbance associated with the Proposed Project could cause direct impacts to individuals and young. **MM-BIO-2** requires daily biological monitoring during vegetation clearing and ground disturbance that results in breaking the ground surface; requires a biological monitor to flush special-status species (including California glossy snake) from suitable habitat prior to initial vegetation removal activities; restricts vehicle speed limits to 15 mph or slower to minimize the generation of fugitive dust; provides for pet restrictions; provides measures to ensure that trash and debris are disposed of properly to minimize short-term impacts of increased human activities; and requires incorporation of native, non-invasive landscaping to minimize the spread of non-native invasive plant and animal species. Potential direct and indirect impacts to California glossy snake would be **less than significant with mitigation incorporated (MM-BIO-2)**.

The project site supports habitat that could be used by birds for nesting. Ground disturbance associated with the Proposed Project could result in direct impacts through the loss of active nests and indirect impacts from adults abandoning active nests due to nearby ground disturbance. **MM-BIO-4** (Nesting Bird Avoidance and Minimization Measures) requires nesting bird surveys of the Proposed Project impact areas. If active nests are found, the biologist must establish buffers and/or implement monitoring to avoid impacting nesting success. Potential direct and indirect impacts to protected nesting birds would be **less than significant with mitigation incorporated (MM-BIO-4)**.

The project site contains jurisdictional waters that would be impacted by the Proposed Project. **MM-BIO-5** (Jurisdictional Waters Permitting and Regulatory Agency Permitting) requires compensatory mitigation, requires that applicable resource agency permits be received prior to Proposed Project implementation, requires that equipment and spoil sites not be placed within or adjacent to aquatic resources, and requires that pollutants be contained to prevent contamination of soils and/or waterways. Potential direct and indirect impacts to jurisdictional waters would be **less than significant with mitigation incorporated (MM-BIO-5)**.

The project site falls within the Western Riverside MSHCP and the Stephens' Kangaroo Rat HCP areas, but March JPA is not a Permittee of either of these plans and is therefore not required to be consistent with either plan. However, for the purposes of CEQA, a project must demonstrate that it will not conflict with any the provisions of an

adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The analysis in Section 3.3.4 shows that **no impacts** would occur relative to the Stephens' Kangaroo Rat HCP and that impacts relative to the Western Riverside MSHCP would be mitigated to **less than significant with mitigation incorporated (MM-BIO-1A, MM-BIO-1B, MM-BIO-2, and MM-BIO-5)**.

Based on the above information, all potentially significant impacts to biological resources can be mitigated to **less than significant**. All other impacts relating to biological resources would be less than significant.

3.3.7 Cumulative Effects

The geographic extent for this cumulative impact analysis includes the jurisdiction of the March JPA planning area and the surrounding area. Table 3-1 in the introduction to Chapter 3, Environmental Analysis, of this EIR includes a list of cumulative development proposals in the vicinity of the project site. Proposed projects near the project site include projects to the east, within the City of Moreno Valley, and to the south, within the City of Perris. This accounts for development projects in the nearby vicinity that may provide habitat for the same species as the project site.

As discussed in Section 3.3.1, Existing Conditions, several special-status plant and wildlife species were determined to be present or have the potential (including low to high potential) to occur on the project site: burrowing owl, San Diego black-tailed jackrabbit, and California glossy snake. Proposed Project implementation would also include impacts to sensitive vegetation communities, jurisdictional waters, and resources protected by local ordinances. Burrowing owl have not been incidentally documented on sites for recent projects immediately surrounding March ARB; e.g., K4 Warehouse project (Rocks Biological Consulting 2019). However, burrowing owls have been documented in nearby areas to the west of Interstate 215, including Meridian South Campus developments (Rocks Biological Consulting 2018) and Veteran's Industrial Park (March JPA 2020). Future growth in the area could result in additional impacts to burrowing owl and potentially significant cumulative impacts to burrowing owls. Because the Proposed Project has a potential to result in significant impacts to burrowing owls, its contribution to cumulative burrowing owl impacts on burrowing owl in the region would be cumulatively considerable. However, with implementation of **MM-BIO-1A** and **MM-BIO-1B**, cumulative impacts would be reduced to less than significant. To further reduce potential impacts to other special-status species and sensitive habitats associated with the project site, **MM-BIO-1A** through **MM-BIO-5** (refer to EIR Section 3.3.5, Mitigation Measures) would be implemented. With implementation of these mitigation measures, cumulative impacts to special-status species and sensitive habitats would be reduced to **less than significant with mitigation incorporated**, and the Proposed Project would not result in a significant cumulative impact to special-status plant or wildlife species.

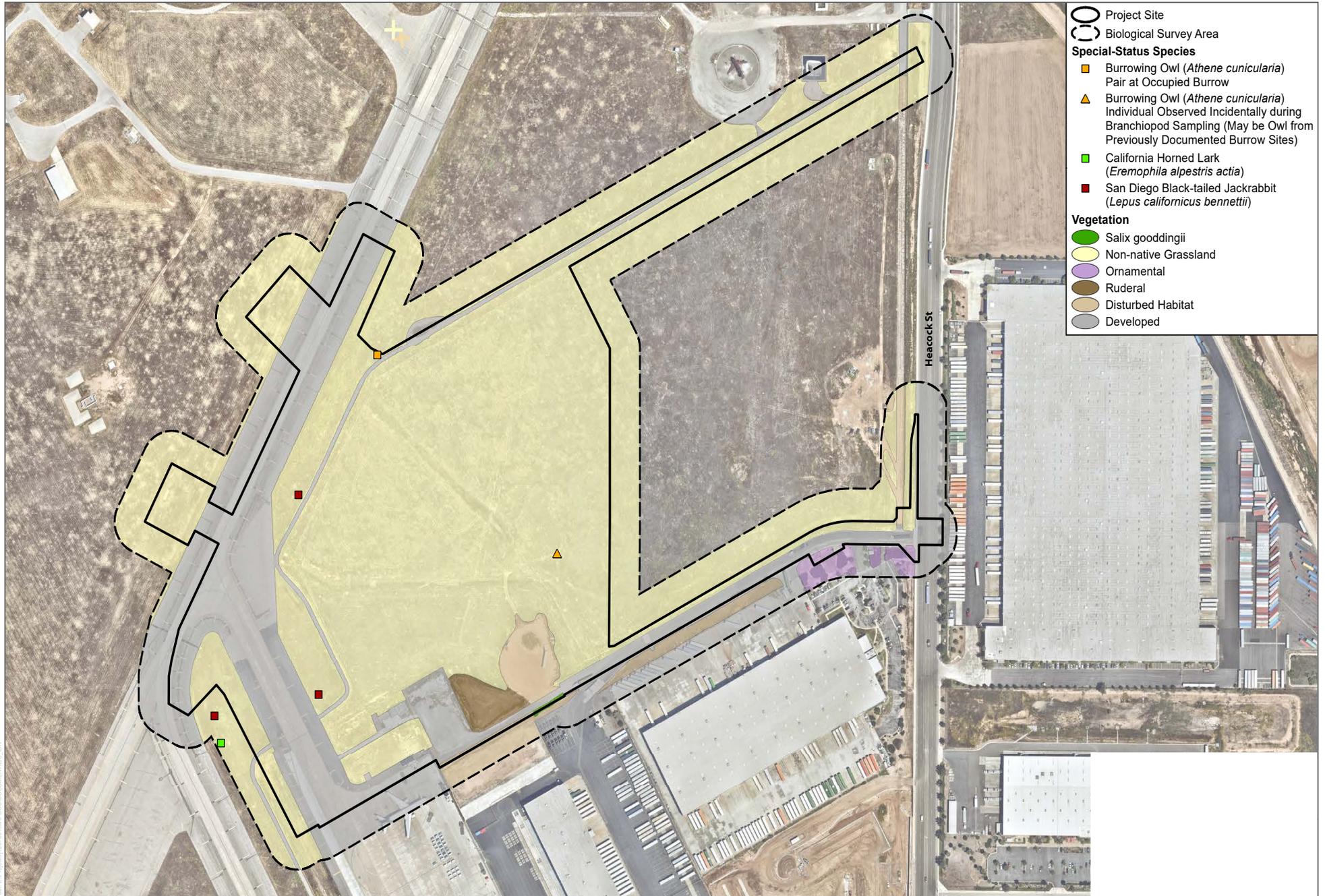
Proposed development that would occur on previously undeveloped land within the March JPA planning area would be required to undergo an evaluation for compliance with biological resources regulations and policies, as the Proposed Project has done, and would be required to mitigate impacts to less than significant. Many of the cumulative projects within the MSHCP area would also be subject to consistency with the MSHCP and Stephens' Kangaroo Rat HCP. Given that March JPA is not a Permittee under the Western Riverside MSHCP or the Stephens' Kangaroo Rat HCP, the Proposed Project would not result in conflicts with these plans. Nevertheless, Proposed Project mitigation (**MM-BIO-1A**, **MM-BIO-1B**, and **MM-BIO-2**) is consistent with the Western Riverside MSHCP requirements for burrowing owl. Implementation of **MM-BIO-2**, **MM-BIO-3**, and **MM-BIO-4** would also provide protection for other MSHCP covered species. For riparian, riverine, and vernal pool resources covered under the MSHCP, impacts are fully addressed through implementation of **MM-BIO-5**. Given that project-specific impacts to the MSHCP can be mitigated to less than significant, the Proposed Project would not create or contribute to a significant cumulative impact.

Given that project-specific impacts related to consistency with the MSHCP can be mitigated to less than significant, that other projects would be required to adhere to the same biological resources regulations and policies, and that this area was already planned for development as part of a larger military base redevelopment (March JPA 1999a), the Proposed Project would not create or contribute to a significant cumulative impact. Cumulative impacts would be **less than significant with mitigation incorporated**.

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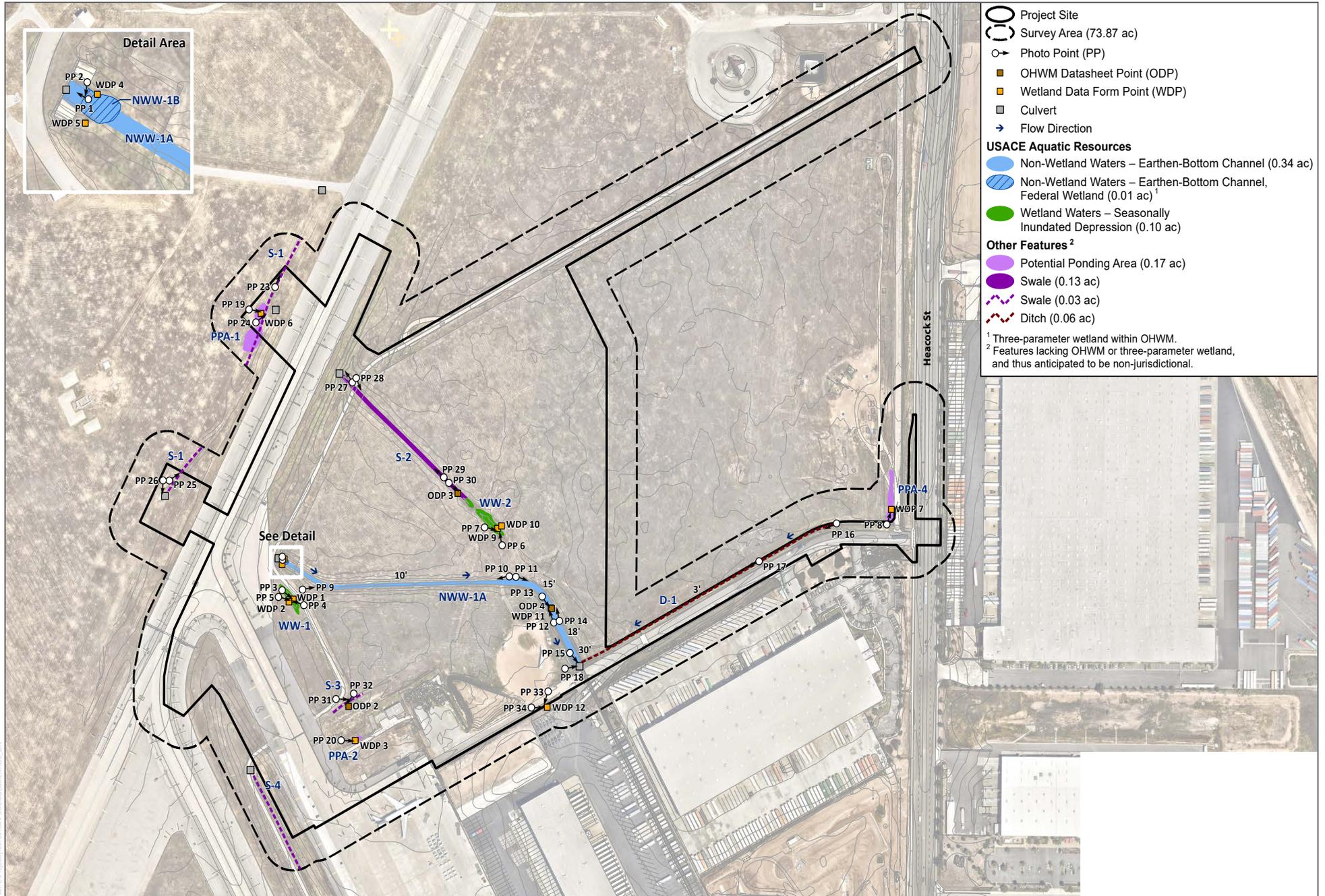
SOURCE: Rocks Biological Consulting, 2022

FIGURE 3.3-1

Biological Resources

Meridian D-1 Gateway Aviation Center Project

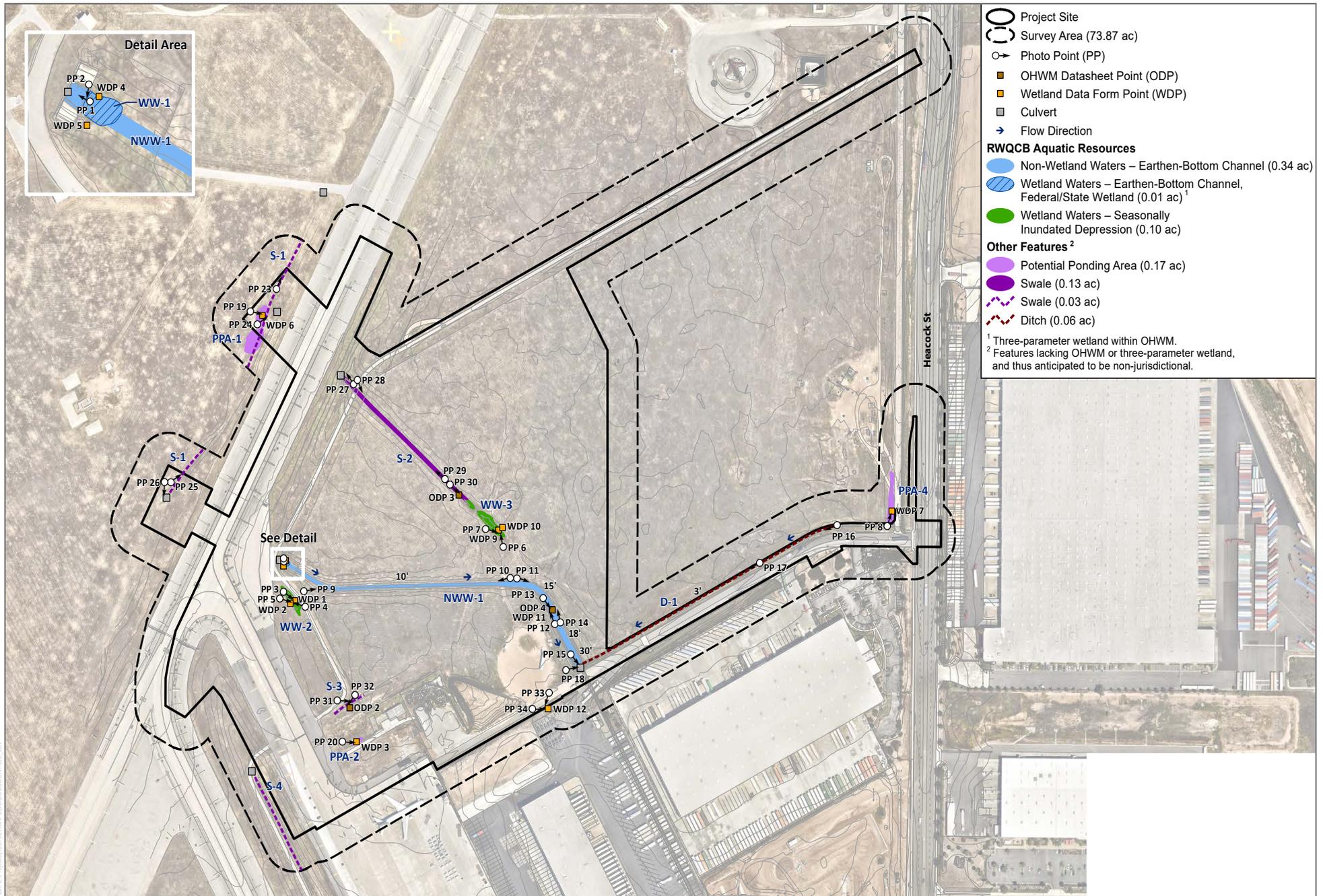
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SOURCE: Rock Biological Consulting, 2022

FIGURE 3.3-2
Aquatic Resources, USACE
 Meridian D-1 Gateway Aviation Center Project

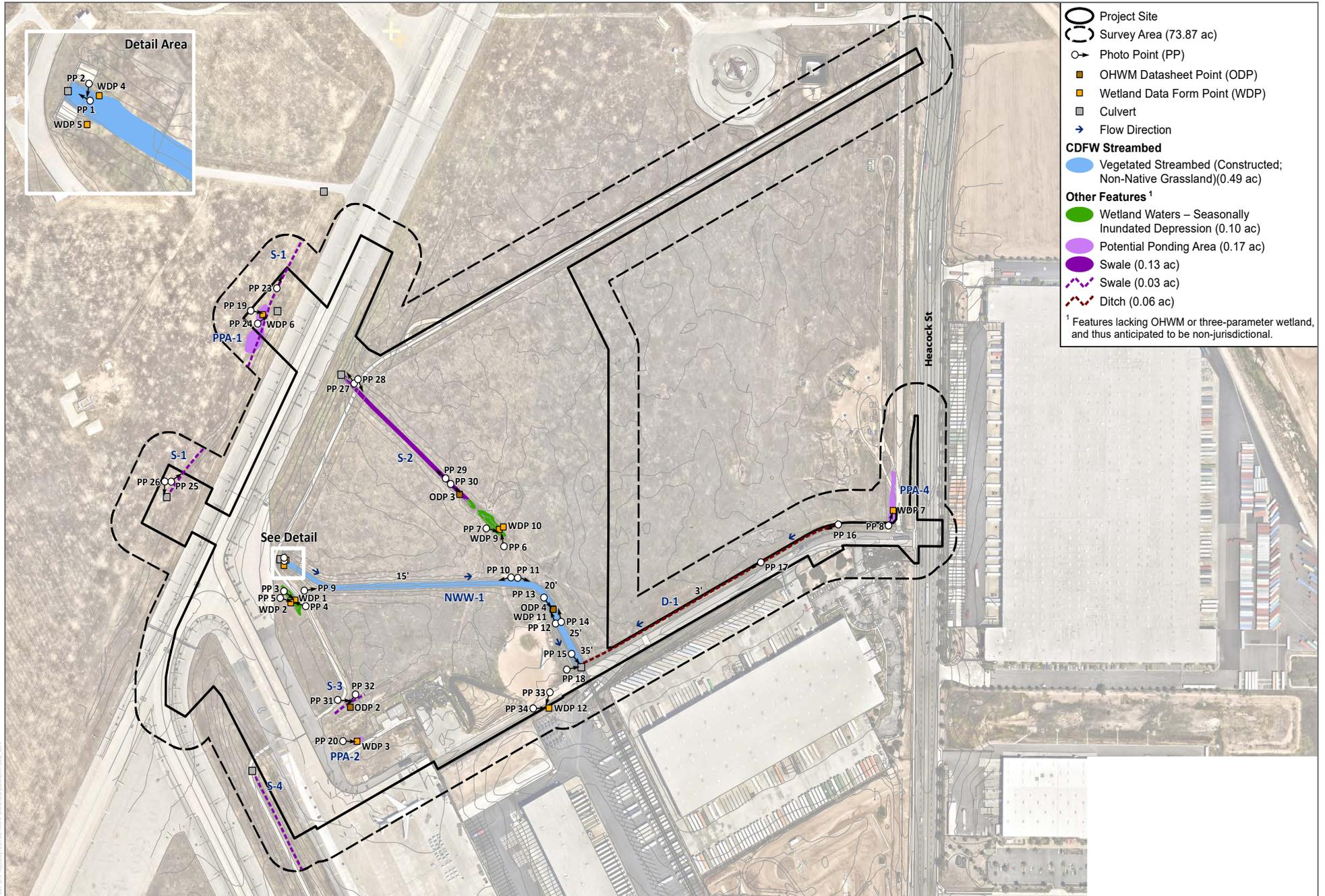
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SOURCE: Rocks Biological Consulting, 2022

FIGURE 3.3-3
 Aquatic Resources, RWQCB
 Meridian D-1 Gateway Aviation Center Project

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SOURCE: Rocks Biological Consulting, 2022

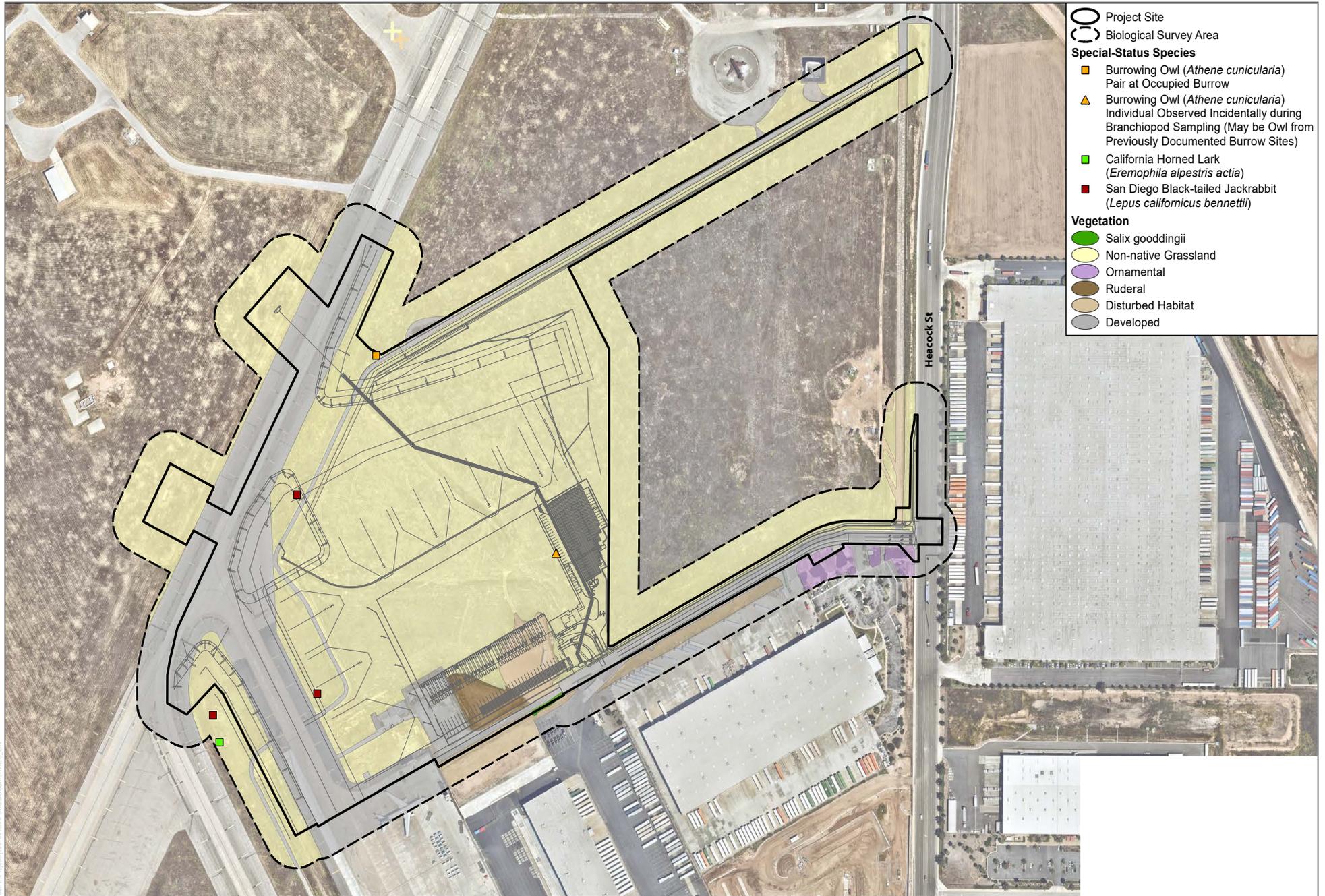


FIGURE 3.3-4

Aquatic Resources, CDFW

Meridian D-1 Gateway Aviation Center Project

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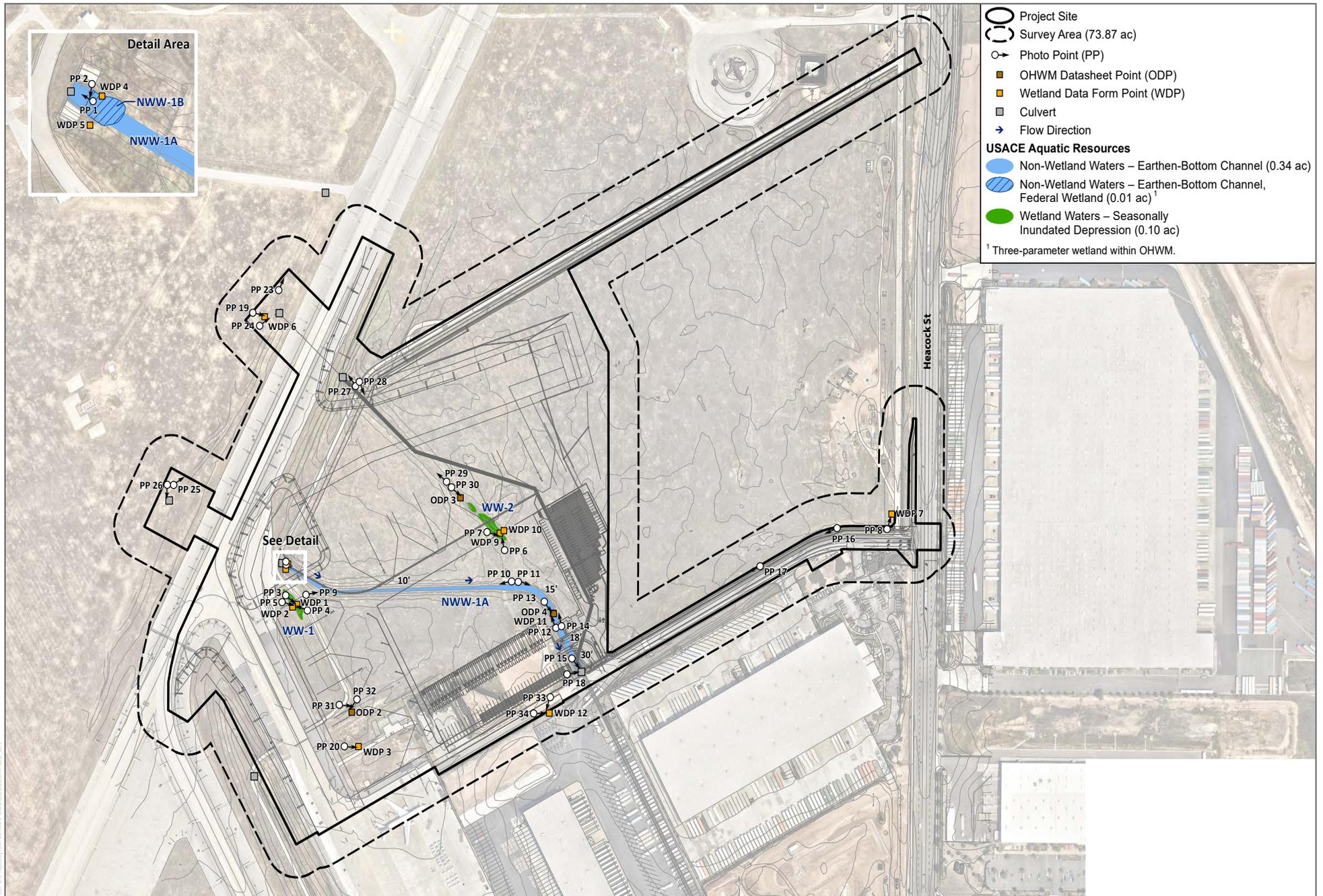
SOURCE: Rocks Biological Consulting, 2022

FIGURE 3.3-5

Impacts to Biological Resources

Meridian D-1 Gateway Aviation Center Project

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SOURCE: Rocks Biological Consulting, 2022

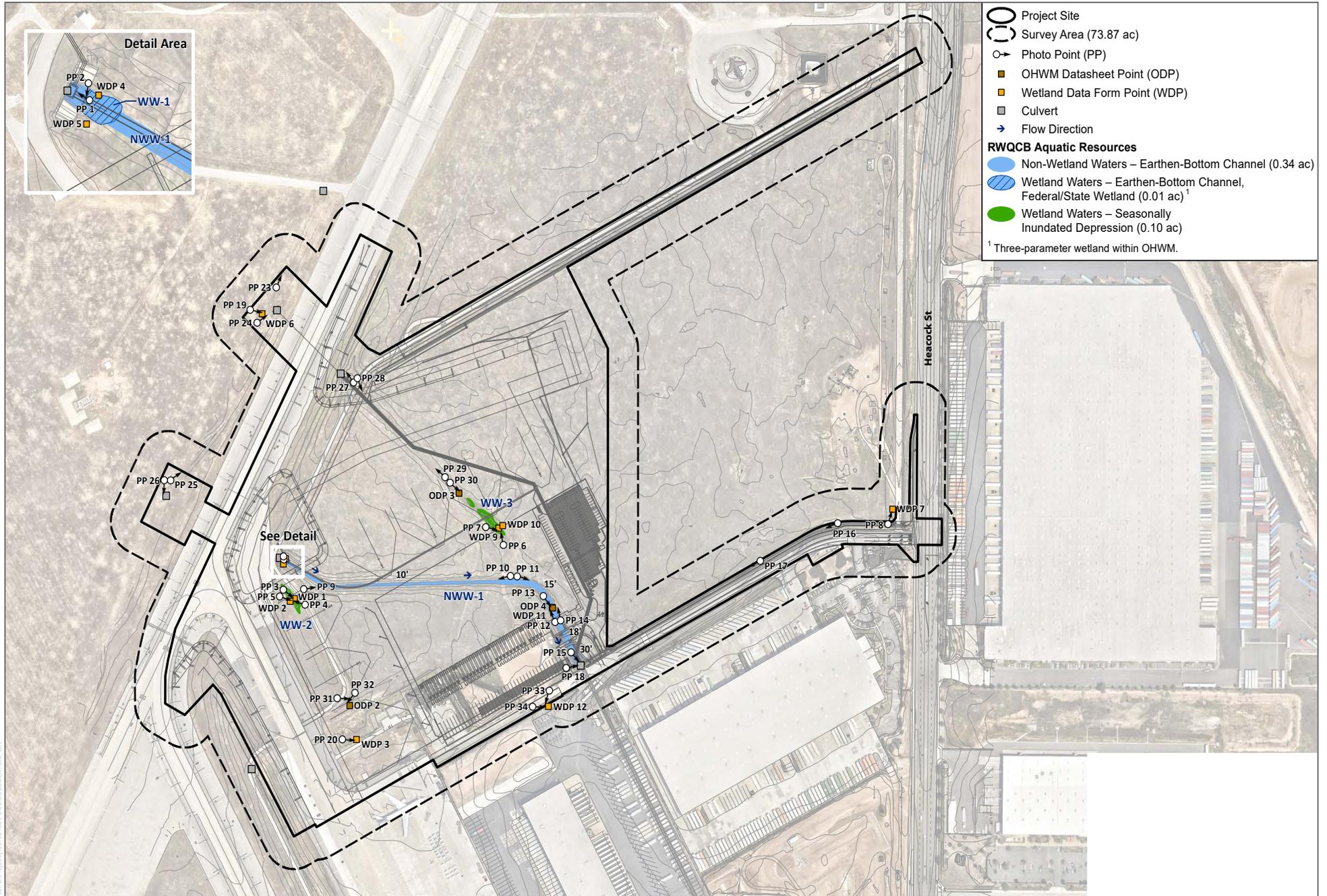


FIGURE 3.3-6

Impacts to Aquatic Resources, USACE

Meridian D-1 Gateway Aviation Center Project

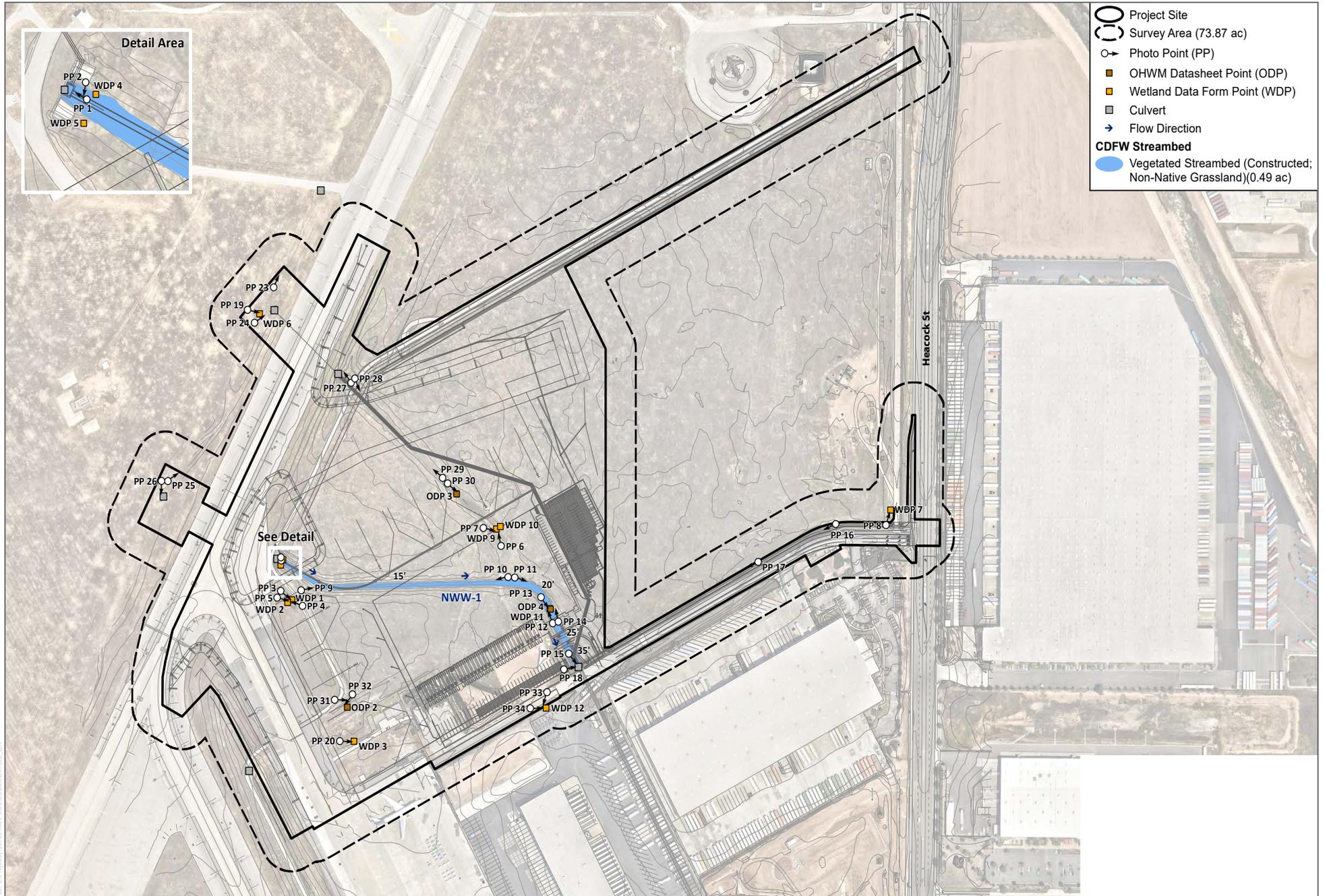
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SOURCE: Rocks Biological Consulting, 2022

FIGURE 3.3-7
Impacts to Aquatic Resources, RWQCB
Meridian D-1 Gateway Aviation Center Project

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SOURCE: Rocks Biological Consulting, 2022



FIGURE 3.3-8

Impacts to Aquatic Resources, CDFW

Meridian D-1 Gateway Aviation Center Project

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3.4 Cultural Resources

This section describes the existing cultural and historical setting of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Proposed Project. The following reference was used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Identification and Evaluation of Historic Properties Gateway Aviation Center Project, March Air Reserve Base (ARB), Moreno Valley Area, Riverside County, California (Historic Properties Report), by CRM TECH in September 2020, included as Appendix E of this EIR.

The purpose of the Historic Properties Report is to provide the March Joint Powers Authority (JPA) with the necessary information and analysis to determine whether the undertaking would have an effect on any historical resources, as defined by 14 CCR 15064.5(a)(1)–(3), or historic properties, as defined by 36 CFR 800.16(l), that may exist in the area of potential effects (APE). The research methods utilized by CRM TECH to identify such resources included a historical/archaeological resources records search, historical and geoarchaeological background research, contacting Native American representatives, and an intensive-level field survey within the APE and vicinity. The geographic extent of these research methods is further defined in Section 3.4.1, Existing Conditions. Other sources consulted are listed in Section 3.4.8, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March JPA. The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March ARB. Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.4.1 Existing Conditions

Defining the Area of Potential Effects

The APE is the geographic area within the boundaries of which impacts are anticipated. The APE analyzed in the Historic Properties Report (Appendix E) is bounded roughly by Heacock Street on the east, the March ARB Fire Department facility on the north, Taxiways A and G on the west, and an industrial warehouse and an air cargo center on the south, as shown in Figure 3.4-1, Area of Potential Effects for Cultural Resources. The APE consists of mostly undeveloped and currently unused land that is relatively level, with a gradual decline to the southeast. Most of the APE features open fields covered by dense, low-lying ruderal grasses and weeds,¹ although some areas have been cleared of vegetation. Existing development on the project site consists of two well extraction facilities, a former (now vacant) fire house constructed between 1978 and 1994, a paved taxiway and tarmac area associated with aviation uses, and various paved improvements located next to the existing taxiway. The topsoil generally consists of fine- to medium-grained clayey loam, reddish brown in color and mixed with some small rocks.

¹ “Ruderal” describes plant species that thrive in disturbed lands.

Eastern Information Center Records Search

The Historic Properties Report documents the results of a California Historical Resources Information System (CHRIS) search conducted at the Eastern Information Center, and a search of the Native American Heritage Commission (NAHC) Sacred Lands File.

CRM TECH completed a CHRIS search at the Eastern Information Center for the APE and the surrounding area within a 1-mile radius on June 8, 2020 (Appendix E). This search included mapped prehistoric, historical, and built-environment resources and properties designated as California Historical Landmarks, Points of Historical Interest, or Riverside County Landmarks. Additional consulted sources included the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and the California Historical Resources Inventory.

Records Search Results

The Eastern Information Center records search for the APE and surrounding area indicated that 31 technical studies have been previously conducted within 1 mile of the APE from the mid-1990s through 2016 that collectively cover roughly 70% of the land within the records search scope, mostly within the boundaries of March ARB. Of these 31 studies, 4 partially or entirely overlap the APE. Of these 4 overlapping studies, 3 were large-scale studies conducted on the entire area of the former March ARB in preparation for its realignment in the mid-1990s. The most recent study among the 4, which was completed in 2016, did not include the westernmost portion of the current APE. During that study, a drainage channel lying within the APE was recorded in the California Historical Resources Inventory and designated as Site 33-024853. As a result of the records search, in addition to Site 33-024853 within the APE, 9 additional historical/archaeological sites and 1 isolate (i.e., a locality with fewer than 3 artifacts) were identified within 1 mile of the APE.

The previously recorded resources are historical in age and consist of the Atchison, Topeka, and Santa Fe Railway; two flood-control channels; structural remains from the World War II-era Camp Haan; and refuse deposits. Several of the sites were remains of facilities at March ARB. Other than Site 33-024853, all recorded resources were found at least 0.5 miles from the APE. Therefore, none of them required further consideration during the preparation of the Historic Properties Report.

Geoarchaeological Analysis

CRM TECH conducted a geoarchaeological analysis to assess the potential for the deposition and preservation of subsurface cultural deposits from the prehistoric period within the APE. Sources consulted for this analysis included primary topographic, geologic, and soil maps pertaining to the APE and surrounding area (Appendix E). The surface geology in the APE has been mapped as Qal, or alluvium of recent (Holocene) age (Rogers 1965). More recently, however, the area has been mapped as Qvof_a, or very old alluvial fan deposits of early Pleistocene age (Morton 2001, 2003; Morton and Cox 2001; Morton and Matti 2001; Morton and Miller 2006). The deposition of the surface sediments in the APE predate the earliest human occupation in the region. The APE is located on an alluvial fan subject to occasional flooding but is nearly 10 miles from any relatively steady streams and would not have provided a favorable setting for permanent or long-term habitation by the aboriginal population during prehistoric times. Instead, the area was likely used as a travel route and for opportunistic subsistence activities, where surviving cultural remains are typically limited to the ground surface and shallow deposits (Appendix E).

Native American Coordination

Ethnographic Setting

According to current ethnohistorical scholarship, the traditional territories of several Native American groups, including the Luiseño, the Serrano, the Gabrieleño, and the Cahuilla, overlapped one another in the present-day Riverside–San Bernardino region during the Late Prehistoric Period. However, the Moreno Valley area is generally recognized as a part of the traditional homeland of the Luiseño, a Takic-speaking people whose territory extended from present-day Riverside to Escondido and Oceanside. The name of the group derived from Mission San Luis Rey, which held jurisdiction over most of the traditional Luiseño territory during the late eighteenth and early nineteenth centuries (Appendix E; Bean and Shipek 1978).

Anthropologists have divided the Luiseño into several autonomous lineages or kin groups, which represented the basic political unit among most Native Americans in Southern California. Each Luiseño lineage possessed a permanent base camp, or village, on the valley floor and another in the mountain regions for acorn collection. Luiseño villages were made up of family members and relatives, the chiefs inherited their positions, and each village owned its own land. Villages were usually located in sheltered canyons or near year-round sources of fresh water, always near subsistence resources (Appendix E; Bean and Shipek 1978).

The Luiseño exploited nearly all resources of the environment in a highly developed seasonal mobility system. Primarily hunters and gatherers, they collected seeds, roots, wild berries, acorns, wild grapes, strawberries, wild onions, and prickly pear cacti, and hunted deer, elks, antelopes, rabbits, wood rats, and a variety of insects. Bows and arrows, atlatls or spear throwers, rabbit sticks, traps, nets, clubs, and slings were the main hunting tools. Each lineage had exclusive hunting and gathering rights in their procurement ranges. These boundaries were respected and only crossed with permission (Appendix E; Bean and Shipek 1978).

It is estimated that when Spanish colonization of Alta California began in 1769, the Luiseño had approximately 50 active villages with an average population of 200 individuals each (making the total population approximately 10,000), although other estimates place the total Luiseño population at 4,000–5,000. Some of the villages were forcibly moved to the Spanish missions, while others were left largely intact. Ultimately, Luiseño population declined rapidly after European contact because of diseases such as smallpox, as well as harsh living conditions at the missions and later on the Mexican ranchos, where the native people often worked as seasonal ranch hands (Appendix E; Bean and Shipek 1978).

After the annexation of Alta California by the United States, the large number of non-native settlers further eroded the foundation of traditional Luiseño society. During the latter half of the nineteenth century, almost all remaining Luiseño villages were displaced, their occupants eventually removed to the various reservations. Today, the nearest Native American groups of Luiseño heritage live on the Soboba, Pechanga, and Pala Indian Reservations.

Sacred Lands File Search and Tribal Outreach

CRM TECH requested a search of the Sacred Lands File from the California NAHC for the Proposed Project's APE on April 21, 2020. In response to CRM TECH's inquiry, NAHC reported that the Sacred Lands File search yielded negative results for Native American cultural resources in the APE, although NAHC did note that the absence of specific information does not indicate the absence of cultural resources and recommended that local Native American groups be contacted for further information. NAHC provided a list of potential contacts in the region for that purpose. Following NAHC's recommendations and previously established consultation protocol, CRM TECH

contacted eight tribal representatives in the region for additional information on potential Native American cultural resources in or near the APE. The written requests for comments were sent to the tribal representatives via both U.S. mail and email on May 1, 2020, and follow-up telephone solicitations were carried out from May 15 through May 22, 2020. This coordination was conducted for informational purposes only and does not constitute formal government-to-government consultation as specified by Assembly Bill (AB) 52. For some of the tribes, the designated spokespersons on cultural resources issues were contacted in lieu of the individuals suggested by NAHC, as recommended previously by the tribal government staff. Five responses (four written, and one by telephone) were received as a result of the tribal outreach letters; these are summarized in Table 3.4-1.

Table 3.4-1. Native American Tribal Communications

Contact Person/Native American Tribe	Response Received (Method)
Mercedes Estrada, Tribal Administrative Assistant, Santa Rosa Band of Cahuilla Indians	No comments regarding the Proposed Project (telephone).
Denisa Torres, Cultural Resources Manager, Morongo Band of Mission Indians	The tribe noted the presence of prehistoric bedrock milling features within a 5-mile radius of the APE but did not make a specific request or recommendation (email).
Bobby Ray Esparza, Cultural Coordinator, Cahuilla Band of Indians	The tribe requested that ground-disturbing activities in the APE be monitored by a representative of the Cahuilla Band (email).
Cheryl Madrigal, Tribal Historic Preservation Officer, Rincon Band of Luiseño Indians	The tribe stated that they had no knowledge of any cultural resources in the APE and requested to review the results of the historical/archaeological resources records search (email).
Joseph Ontiveros, Tribal Historic Preservation Officer, Soboba Band of Luiseño Indians	The tribe reported that multiple areas of potential impact were identified during an in-house database search and requested further consultation with March JPA and FAA. Furthermore, the tribe requested that ground-disturbing activities in the APE be monitored by a representative of the Soboba Band (email).
Ray Chapparosa, Chairperson, Los Coyotes Band of Cahuilla and Cupeño Indians	No response.
Molly Earp-Escobar, Cultural Planning Specialist, Pechanga Band of Luiseño Indians	No response.
John Gomez Jr., Cultural Resource Coordinator, Ramona Band of Cahuilla Indians	No response.

Note: APE = area of potential effects; JPA = Joint Powers Authority; FAA = Federal Aviation Administration.

Assembly Bill 52 Consultation

The Proposed Project is subject to compliance with AB 52 (California Public Resources Code [PRC] Section 21074), which requires consideration of impacts to tribal cultural resources (TCRs) and that the lead agency notify California Native American tribal representatives (who have requested notification) who are traditionally or culturally affiliated with the geographic area of the project site. All NAHC-listed California Native American tribal representatives who have requested project notification pursuant to AB 52 were sent letters by March JPA on August 19, 2020 (see Table 3.4-2). The letters contained a project description, an outline of AB 52 timing, a request for consultation, and contact information for the appropriate lead agency representative. The request for tribal consultation window under AB 52 closed on September 18, 2020.

Responses providing a formal request to begin consultation were received by March JPA staff on August 28, 2020, from the Pechanga Band of Luiseño Indians; September 3, 2020, from the Rincon Band of Luiseño Indians; September 17, 2020, from the Agua Caliente Band of Cahuilla Indians; and October 6, 2020, from the Soboba Band of Luiseño Indians. On August 20, 2020, March JPA staff received a response from the Quechan Tribe of the Fort Yuma Reservation, stating that the tribe had no comments and would defer to the more local tribes. On August 19, 2020, March JPA staff received a response from the San Manuel Band of Mission Indians, stating that the tribe had no concerns over implementation of the Proposed Project. The tribe provided a list of mitigation measures/conditions of approval in their response and requested that the language be included as part of the Proposed Project. No other responses were received. Documents related to AB 52 consultation are on file with March JPA.

Table 3.4-2. Assembly Bill 52 NAHC-Listed Native American Contacts

Native American Tribal Representative	Tribe
Jeff Grubbe, Chairperson	Agua Caliente Band of Cahuilla Indians
Amanda Vance, Chairperson	Augustine Band of Cahuilla Mission Indians
Doug Welmas, Chairperson	Cabazon Band of Mission Indians
Daniel Salgado, Chairperson	Cahuilla Band of Indians
Ralph Goff, Chairperson	Campo Band of Mission Indians
Robert Pinot, Chairperson	Ewiiapaayp Tribal Office
Michael Garcia, Vice Chairperson	Ewiiapaayp Tribal Office
Andrew Salas, Chairperson	Gabrieleño Band of Mission Indians–Kizh Nation
Anthony Morales, Chairperson	Gabrieleño–Tongva San Gabriel Band of Mission Indians
Sandonne Goad, Chairperson	Gabrieleño–Tongva Nation
Robert Dorame, Chairperson	Gabrieleño–Tongva Indians California Tribal Council
Charles Alvarez	Gabrieleño–Tongva Tribe
Matias Belardes, Chairperson	Juaneño Band of Mission Indians Acjachemen Nation–Belardes
Javaughn Miller, Tribal	La Posta Band of Mission Indians
Gwendolyn Parada, Chairperson	La Posta Band of Mission Indians
Shane Chapparosa, Chairperson	Los Coyotes Band of Mission Indians
Angela Elliott Santos, Chairperson	Manzanita Band of Kumeyaay Nation
Michael Linton, Chairperson	Mesa Grande Band of Diegueño Mission Indians
Robert Martin, Chairperson	Morongó Band of Mission Indians
Mark Macarro, Chairperson	Pechanga Band of Luiseño Indians
Jill McCormick, Historic Preservation Officer	Quechan Tribe of the Fort Yuma Reservation
Joseph Hamilton, Chairperson	Ramona Band of Cahuilla Mission Indians
Bo Mazzetti, Chairperson	Rincon Band of Luiseño Indians
Cheryl Madrigal, Tribal Historic Preservation Officer	Rincon Band of Luiseño Indians
Jessica Mauck, Director of Cultural Resources	San Manuel Band of Mission Indians
Steven Estrada, Chairperson	Santa Rosa Band of Mission Indians
Scott Cozart, Chairperson	Soboba Band of Luiseño Indians
Cody J. Martinez, Chairperson	Sycuan Band of the Kumeyaay
Thomas Torte, Chairperson	Torres–Martinez Desert Cahuilla Indians

Note: NAHC = Native American Heritage Commission.

Historical Resources Research and Field Survey

Research

CRM TECH reviewed published literature in local and regional history, archival records of the U.S. Bureau of Land Management and the County of Riverside, U.S. General Land Office land survey plat maps dated 1856, U.S. Geological Survey topographic maps dated 1901–1980, and aerial photographs taken in 1966–2018 to understand the development of the APE and surrounding area. The geographic extent of the surrounding area, for purposes of the historical research, included an approximately 3- to 4-mile radius around the APE (refer to Appendix E, Figures 6 and 7). Historical sources consulted during this study yielded no evidence of any settlement or development activities in or near the APE before the present-day March ARB expanded to this area during World War II (Appendix E).

In the 1850s through the 1890s, the only built features known to be present in the APE and surrounding area were crisscrossing roads, including one that ran northwest–southeast across the eastern portion of the APE. The military base was originally built by the U.S. Army in 1918 as Alessandro Aviation Field, but it was renamed March Field later that year. Although it is not shown in maps published during World War II, by the 1930s March Field occupied a roughly 0.8-by-0.8-mile area in and around what is now the March Field Historic District on March ARB (Appendix E).

During 1941–1942, the U.S. government acquired several hundred acres of adjacent land and doubled the size of March Field in preparation for its wartime service as a bomber crew training facility that hosted as many as 75,000 troops. The name of the base was changed to March Army Air Field in 1941, March Army Air Base in 1942, March Air Force Base in 1947, and finally March Air Reserve Base in 1996 (Appendix E).

Among the existing features in the APE, Taxiway A, running northeast to southwest along the northwestern project site boundary, was known to be extant by the early 1950s, evidently a result of the 1940s expansion (Appendix E). Taxiway G, running northwest to southeast along the southwestern project site boundary, and the associated apron were both constructed between 1953 and 1966. The drainage channel recorded in 2016 as Site 33-024853 was also present by 1966. Because the channel drains into Lateral B of the Perris Valley Storm Drain, which was built by the Riverside County Flood Control District in 1955, the earthen channel in the APE likely also dates to the mid-1950s (Appendix E). Since the 1960s, no major changes have been observed in the land use or other characteristics of the APE despite the construction of the nearby warehouses between 1997 and 2005 and the fire station constructed between 1978 and 1994 (NETR 2020).

Field Survey

CRM TECH conducted a pedestrian field survey of the APE on June 23, 2020. The June 2020 survey was completed by one CRM TECH field director and one CRM TECH archaeologist walking a series of parallel north–south and northeast–southwest transects at 15-meter (approximately 50-foot) intervals. The surveyors systematically surveyed for any evidence of human activities dating to the prehistoric or historic period. Ground visibility was variable, ranging from poor (nearly 0%) in open fields with dense vegetation to excellent (100%) where the ground surface had been cleared. In light of past ground disturbances in the APE, the ground visibility was considered adequate for the survey and for completion of the Historic Properties Report (Appendix E).

No cultural historic-era resources were identified within the APE as a result of the CHRIS records search, Native American outreach, or intensive pedestrian survey, with the exception of Site 33-024853 (Drainage Channel), CRM TECH 3611-1H, and CRM TECH 3611-2H (Taxiways A and G) (Appendix E). These three sites were evaluated against the criteria for listing in the NRHP and none were found to be eligible for the NRHP.

Archaeological Resources Research and Field Survey

CRM TECH conducted a field survey of the APE on June 23, 2020, for archaeological resources. Additionally, a CHRIS records search was conducted for the APE and a 1-mile buffer around the APE. An NAHC Sacred Lands File search and tribal outreach were also conducted. No archaeological resources were identified within the APE as a result of the CHRIS records search, Sacred Lands File search, Native American outreach, or field survey (Appendix E).

3.4.2 Relevant Plans, Policies, and Ordinances

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.), authorized the NRHP. Overseen by the National Park Service under the U.S. Department of the Interior, the NRHP is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Its listings encompass all National Historic Landmarks and historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide federal agencies, state and local governments, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing in the NRHP, it must be demonstrated to possess integrity and to meet at least one of the following criteria (NPS 1997):

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in the NRHP guidance as “the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity” (NPS 1997). Historic properties either retain integrity (convey their significance) or they do not. Within the concept of integrity, the NRHP criteria recognize seven aspects or qualities that define integrity: location, setting, design,

materials, workmanship, feeling, and association. To retain historic integrity, “a property will always possess several, and usually most, of the aspects” (NPS 1997).

The NRHP guidance further requires that properties be completed at least 50 years ago to be considered for eligibility. Properties completed less than 50 years before evaluation must be proven to be “exceptionally important” (criteria consideration G of the NRHP guidance) to be considered for listing (NPS 1997).

Under Section 106 of the National Historic Preservation Act, a historic property is defined as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties that are of traditional religious and cultural importance to a Native American tribe or Native Hawaiian organization and that meet the NRHP criteria (36 CFR 800.16[1]).

Impacts on historic properties under Section 106 of the National Historic Preservation Act are defined in the assessment of impacts (or adverse effects) in 36 CFR 800.5(a):

- (1) An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property’s eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.
- (2) Adverse effects on historic properties are clearly defined and include, but are not limited to:
 - (i) Physical destruction of or damage to all or part of the property;
 - (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines;
 - (iii) Removal of the property from its historic location;
 - (iv) Change of the character of the property’s use or of physical features within the property’s setting that contributes to its historic significance;
 - (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property’s significant historic features;
 - (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
 - (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.

To comply with Section 106, the criteria of adverse impact are applied to historic properties, if any exist in an APE, pursuant to 36 CFR 800.5(a)(1). If no historic properties are identified in an APE, a finding of “no historic properties affected” will be made. If there are historic properties in an APE, application of the criteria of adverse effect will

result in action-related findings of either “no adverse effect” or “adverse effect.” A finding of no adverse effect may be appropriate when the undertaking’s effects do not meet the thresholds in criteria of adverse effect found in 36 CFR 800.5(a)(1), in certain cases when the undertaking is modified to avoid or lessen effects, or if conditions are imposed to ensure review of rehabilitation plans for conformance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties (codified in 36 CFR Part 68).

State

California Register of Historical Resources

In California, the term “historical resource” includes “any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California” (PRC Section 5020.1[j]). In 1992, the California legislature established the CRHR “to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). According to PRC Section 5024.1(c), a resource may be listed as a historical resource in the CRHR if it meets at least one of the following criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric- and historic-era resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are California Historical Landmarks from No. 770 onward, California Points of Historical Interest designated after January 1998, and resources recommended by the State Historical Resources Commission. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98

California law protects Native American burials, skeletal remains, and associated grave goods regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code (H&SC) Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the County Coroner has examined the remains (H&SC Section 7050.5[b]). PRC

Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the Coroner determines or has reason to believe the remains are those of a Native American, the Coroner must contact NAHC within 24 hours (H&SC Section 7050.5[c]). NAHC will notify the most likely descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 48 hours of being granted access to the site. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Assembly Bill 52

The California Environmental Quality Act (CEQA) requires an assessment of impacts associated with the direct or indirect destruction of a historic resource, a unique archaeological resource, or a TCR or site with cultural value to a California Native American tribe. AB 52 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. The primary intent of AB 52 was to include California Native American tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as TCRs. PRC Section 21074(a)(1) and (2) defines *TCRs* as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe” that are either included or determined to be eligible for inclusion in the CRHR or included in a local register of historical resources, or a resource that is determined to be a TCR by a lead agency in its discretion and as supported by substantial evidence.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact or tribal representatives of California Native American tribes that are traditionally and culturally affiliated with the geographic area of a site (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1[b]). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency’s formal notification, and the lead agency must begin consultation within 30 days of receiving the tribe’s request for consultation (PRC Sections 21080.3.1[d] and 21080.3.1[e]).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary, the significance of TCRs, the significance of a project’s impacts on TCRs, project alternatives or appropriate measures for preservation, and mitigation measures. Consultation is considered concluded when either (1) the parties agree to measures to mitigate or avoid an adverse effect, if an adverse effect exists, on a TCR, or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2[b]).

If a California Native American tribe has requested consultation pursuant to PRC Section 21080.3.1 and has failed to provide comments to the lead agency or otherwise failed to engage in the consultation process, or if the lead agency has complied with PRC Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an environmental document (PRC Section 21082.3[d][2] and [3]).

PRC Section 21082.3(c)(1) states that any information, including the location, description, and use of TCRs, that is submitted by a California Native American tribe during the environmental review process must not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information must be

published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

Local

March JPA General Plan

The Resource Management Element of the March JPA General Plan defines cultural and historical resources as those consisting of historic structures and facilities, archaeological resources, and paleontological resources. The Resource Management Element states that cultural resources are limited, are often-non-renewable, and need to be carefully preserved and managed.

The goal and policies relevant to cultural resources and the Proposed Project from the Resource Management Element are described below (March JPA 1999):

Goal 1: Promote cultural awareness through preservation of the planning area's historic, archaeological and paleontological resources.

Policy 7.5: Require development proposals that are located on or near archaeological or paleontological resources to provide a cultural resources study that assesses potential impacts to the resource as a result of the proposed development. The report will include measures to avoid destruction of any significant cultural resources.

Policy 7.6: Require the preservation of identified cultural resources to the extent possible, prior to development, through dedication, removal, transfer, reuse, or other means.

3.4.3 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's impacts related to cultural resources are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, as applicable, the March JPA CEQA Guidelines (March JPA 2022). For the purposes of the analysis in this EIR, a significant impact related to cultural resources would occur if the Proposed Project would:

- CUL-1** Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5.
- CUL-2** Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.
- CUL-3** Disturb any human remains, including those interred outside of dedicated cemeteries.

3.4.4 Impacts Analysis

Threshold CUL-1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

No Impact. As discussed in Section 3.4.1, Sites 33-024853, CRM TECH 3611-1H, and CRM TECH 3611-2H, representing a drainage channel and two taxiways at March ARB, are the only potential “historic properties” or “historical resources” identified within the APE. These three sites were evaluated against the criteria for listing in the NRHP and the CRHR, and the results are summarized below.

Site 33-024853 (Drainage Channel)

The drainage channel (Site 33-024853) was found ineligible under all NRHP and CRHR designation criteria (see Section 3.4.2, Relevant Plans, Policies, and Ordinances). The drainage channel was not an important engineering project within the history and development of Riverside County, and it is not known to be directly associated with any other important historical events. Although it is associated with the event of post-World War II expansion at the former March Air Force Base, this segment of channel is not an important physical expression of this event or period in the current March ARB’s history. It constitutes a minor utilitarian feature within the larger overall scheme of flood control development within the region, and it is one of many similar flood protective works built throughout Southern California. The channel was constructed by the U.S. Army Corps of Engineers and its contractors, not by individuals. There is no evidence that the subject channel has any known direct association with the productive lives of important individuals in local, regional, state, or national history. Thus, it does not demonstrate a unique or particularly close association with that event or with any other events (Criterion A/1) or persons (Criterion B/2) of recognized historic significance. Additionally, the channel does not stand out from other similar earthen flood-control channels as having architectural or engineering merits. Rather, the channel is of standard design and construction, not unlike any other simple earthen flood-control channel. Thus, it is not an important example of a style, type, period, region, or method of construction, nor is it known to represent the work of a prominent architect, designer, engineer, or builder (Criterion C/3). Finally, the channel demonstrates little potential for important historical/archaeological information, as the channel has not yielded, nor is it likely to yield, information important to the study of flood control systems of its particular type or vintage in local, state, or national history (Criterion D/4; Appendix E). Therefore, Site 33-024853 is not considered a historical resource for the purposes of CEQA.

Sites CRM TECH 3611-1H and CRM TECH 3611-2H (Taxiways A and G)

Taxiway A, Taxiway G, and the apron along Taxiway G are nondescript, minor infrastructure features of standard design and construction that date to the late historic period. As such, none of them stands out as an important example of a style, type, period, region, or method of construction, nor are they known to represent the work of a prominent architect, designer, engineer, or builder. Taxiway A was evidently built during the World War II-era expansion of the current March ARB, while Taxiway G and the apron were added during the early post-World War II era. As such, both sites are arguably associated with establishment and growth of what is now March ARB. However, as secondary, peripheral features of the current March ARB, they do not demonstrate a unique, important, or particularly close association with that event or with other events or persons of recognized historic significance. Furthermore, these working components of modern transportation infrastructure are subject to frequent maintenance and repairs, and as a result do not

demonstrate any distinctively historical characteristics (Appendix E). Therefore, Sites CRM TECH 3611-1H and CRM TECH 3611-2H do not meet the criteria for listing in the NRHP or the CRHR, and do not qualify as “historic properties” or “historical resources.”

As described above, none of the three identified sites meets the definition of a historic property or a historical resource. Thus, the Proposed Project would result in **no impact** to historical resources.

Threshold CUL-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less-Than-Significant Impact with Mitigation Incorporated. No Native American cultural resources were identified within the APE as a result of the CHRIS records search conducted on June 8, 2020, for the APE and a 1-mile buffer (Appendix E). In addition, NAHC reported that the Sacred Lands File search yielded negative results for Native American cultural resources in the APE. Finally, government-to-government consultation initiated by March JPA has not resulted in the identification of a TCR within or near the APE to date. No TCRs have been identified by California Native American tribes as part of March JPA’s completed AB 52 notification and consultation process. However, in consideration of the known sensitivity of the project site for cultural resources, as well as the requests for monitoring by the Soboba Band of Luiseño Indians, **Mitigation Measure (MM) CUL-1** (Archaeological and Tribal Monitoring) is included in the Proposed Project to provide for archaeological and tribal monitoring for all initial ground-disturbing activities, as well as the authority of the archaeological and tribal monitors to temporarily divert, redirect, or halt the ground-disturbing activities to allow for identification, evaluation, and potential recovery of cultural resources in coordination with March JPA (see Section 3.4.5, Mitigation Measures, for the full text of all cultural resource mitigation measures). Additionally, **MM-CUL-1** requires all construction personnel to complete a Cultural Resources Worker Sensitivity Training program prior to commencement of construction activities. Therefore, impacts to Native American cultural resources would be **less than significant with mitigation incorporated**.

CRM TECH conducted a field survey of the APE on June 23, 2020, for archaeological resources. Additionally, a CHRIS records search was conducted for the APE and within a 1-mile buffer around the APE, and an NAHC Sacred Lands File search and tribal outreach were conducted. No archaeological resources were identified within the APE as a result of the CHRIS records search, Sacred Lands File Search, Native American tribal outreach, or field survey.

The geoarchaeological analysis conducted for the Proposed Project assessed the potential for the deposition and preservation of subsurface cultural deposits within the APE. Sources consulted for this purpose included topographic, geologic, and soil maps pertaining to the surrounding area. The results of the geoarchaeological analysis determined that surface soils within March ARB and the APE have been extensively disturbed by past construction and military activities since the beginning of Alessandro Aviation Field in 1918. In the APE, the presence of the drainage channel at Site 33-024853, the taxiways, and the underground utility lines indicate prior disturbances to the surface and subsurface sediments. Based on the APE’s geoarchaeological profile, the surface and subsurface sediments in the APE are considered to have a low sensitivity for containing archaeological resources (Appendix E). However, it is possible that unanticipated discoveries could be encountered during ground-disturbing activities associated with the Proposed Project. If such unanticipated discoveries are encountered, impacts to archaeological resources would be potentially adverse. However, **MM-CUL-2** (Inadvertent Discovery of Archaeological Resources) will be implemented, which requires that all construction work occurring within 100 feet of a find immediately stop until the on-site qualified archaeologist

meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology can evaluate the significance of the find to determine the appropriate course of action (see Section 3.4.5). March ARB and March JPA shall only grant authorization to resume construction after consultation with the qualified archaeologist, and such authorization shall be predicated on implementation of all appropriate measures to protect any possible archaeological resources.

Although the APE is considered to have low sensitivity for containing archaeological resources, it is possible that unanticipated discoveries could be encountered during ground-disturbing activities associated with the Proposed Project. If such unanticipated discoveries were encountered, impacts to archaeological resources would be potentially significant. However, with implementation of **MM-CUL-2**, which requires that all construction work occurring within 100 feet of the find immediately stop until the on-site qualified archaeologist can evaluate the significance of the find, potentially significant impacts to archaeological resources would be reduced to **less than significant with mitigation incorporated**.

Threshold CUL-3: Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less-Than-Significant Impact with Mitigation Incorporated. No prehistoric or historic burials were identified within the APE as a result of the CHRIS or Sacred Lands File records search, tribal outreach, or field survey (Appendix E). Thus, the likelihood of encountering human remains as a result of implementation of the Proposed Project is low to nonexistent. However, it is possible that unanticipated human remains could be encountered during ground-disturbing activities associated with the Proposed Project, which would be a potentially significant impact. In the unexpected event that human remains are unearthed during construction activities within the APE, **MM-CUL-3** (Inadvertent Discovery of Human Remains) would address potential impacts (see Section 3.4.5). With implementation of **MM-CUL-3**, the discovery of human remains would be handled in accordance with H&SC Section 7050.5 and PRC Section 5097.98, which state that in the event that human remains are discovered during construction, construction activity must be halted and the contractor must contact the Riverside County Coroner to evaluate the discovery. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify NAHC within 24 hours. In accordance with PRC Section 5097.98, NAHC shall immediately notify the persons it believes to be the MLDs of the deceased Native American. The MLDs shall complete their inspection within 48 hours of being granted access to the site. The MLDs shall determine, in consultation with the property owner or their representative, the disposition of the human remains. Authorization to resume construction shall be given by March JPA only after consultation with the MLDs and shall include implementation of all appropriate measures to protect any possible burial sites and/or human remains. With implementation of **MM-CUL-3**, impacts to human remains would be **less than significant with mitigation incorporated**.

3.4.5 Mitigation Measures

MM-CUL-1 Archaeological and Tribal Monitoring. Prior to issuance of a grading permit, the project applicant shall retain a qualified tribal monitor to monitor all initial ground-disturbing activities, including, but not limited to, clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, and structure demolition. The applicant shall secure an agreement with the tribe (or tribes) for tribal monitoring. The applicant shall submit a copy of a signed contract between the tribe (or tribes) and the landowner/applicant for the monitoring of the Proposed Project to March Air Reserve Base (ARB) and the March Joint Powers Authority (JPA)

Planning Director. The applicant shall provide a minimum of 30 days' advance notice to the tribe (or tribes) of all mass grading and trenching activities.

Prior to the commencement of ground-disturbing activities, the Proposed Project's qualified archaeological Principal Investigator (Principal Investigator), meeting the Secretary of the Interior's Professional Qualification Standards, in consultation with the tribe, March ARB, March JPA, and the construction manager, shall develop a Cultural Resource Monitoring and Treatment Plan (CRMTP). The CRMTP shall define the process to be followed upon discovery of cultural resources to ensure the proper treatment, evaluation, and management of cultural resources within the project site, should they be encountered during construction.

- A. For purposes of CRMTP implementation, the project area subject to monitoring is defined as:
 1. All areas within the project site boundary specifically in which ground-disturbing activities (e.g., including, but not limited to, clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, and structure demolition) will occur are subject to monitoring.
 2. Any on-site or off-site ancillary Proposed Project use areas or facility locations are subject to the protocols outlined in the CRMTP. These include, but are not limited to, access roadways, yards/support areas, easements, staging areas, and utility tie-ins.
- B. The CRMTP shall include a requirement for all construction personnel to complete a Cultural Resources Worker Sensitivity Training program (Training) prior to commencement of construction activities. The Training shall be conducted by a qualified archaeologist (Project Archaeologist). The Training shall provide (1) the types and characteristics of cultural materials that may be identified during construction and an explanation of the importance of and legal basis for the protection of significant cultural resources; (2) proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities, including procedures for work curtailment or redirection; and (3) protocols for contacting the site supervisor and archaeological and tribal monitor upon discovery of cultural resources or human remains. All new construction personnel must take the Training prior to beginning ground-disturbing activities.
- C. The following protocols shall be included in the CRMTP:
 1. The Project Archaeologist and the tribal monitor(s) shall manage and oversee monitoring for all initial ground-disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, structure demolition, etc. The Project Archaeologist and the tribal monitor(s) shall have the authority to temporarily divert, redirect, or halt the ground-disturbing activities to allow identification, evaluation, and potential recovery of cultural resources in coordination with March JPA.
 2. If, during ground-disturbing activities, potential cultural resources are inadvertently discovered, the Project Archaeologist and tribal monitor(s) shall immediately redirect grading operations in a 100-foot radius around the discovery and the following procedures shall be followed:
 - a. All ground-disturbing activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the applicant, the Principal Investigator, the tribal representative(s), the Project Archaeologist and tribal monitors,

and the Planning Director to discuss the significance of the find pursuant to California Public Resources Code (PRC) Section 21083.2.

- b. At the meeting, the significance of the discovery shall be discussed and after consultation with the Principal Investigator, the tribal representative(s), the Project Archaeologist, and tribal monitors, a decision shall be made, with the concurrence of the Planning Director, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources.
- c. Grading or further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation.
- d. Treatment and disposition of the inadvertently discovered cultural resources shall be carried out in one or more of the following methods:
 - i. Pursuant to PRC Section 21083.2(b), avoidance is the preferred method of preservation for cultural resources.
 - ii. During the course of construction, all discovered resources shall be temporarily curated in a secure location on site or at the offices of the Project Archaeologist. If removal of artifacts from the project site is necessary, each artifact shall be cataloged, and an inventory will be provided to the tribal monitor upon each addition. No recordation of sacred items is permitted without the written consent of the tribe.
 - iii. Following the completion of the Proposed Project, the applicant shall relinquish ownership of all cultural resources that have been determined to be of Native American origin to the tribe.
 - iv. If the landowner and the tribe cannot come to a consensus on the significance of, or the mitigation for, the Native American cultural resource, these issues will be presented to the Planning Director for decision. The Planning Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and recommendations of the archaeological Principal Investigator and shall consider the cultural and religious principles and practices of the tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to March JPA.
 - v. On-site reburial of the discovered items may occur and shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed.

Regardless of discovery, at the completion of all ground-disturbing activities, the Project Archaeologist shall prepare a Monitoring Report and submit it to March ARB; March JPA; the Eastern Information Center located at the University of California, Riverside; and the designated tribal government. The Monitoring Report will document all monitoring efforts and be completed within 60 days of conclusion of all ground-disturbing activities.

MM-CUL-2 Inadvertent Discovery of Archaeological Resources. In the event that archaeological resources are inadvertently unearthed during excavation and grading activities for the Proposed Project, the contractor shall cease all earth-disturbing activities within a 100-foot radius of the area of the discovery and notify March Air Reserve Base (ARB) and March Joint Powers Authority (JPA). The

Project Archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, shall evaluate the significance of the find and determine the appropriate course of action. Authorization to resume construction shall be given by March ARB and March JPA only after consultation with the qualified archaeologist and shall include implementation of all appropriate measures to protect any possible archaeological resources.

MM-CUL-3 Inadvertent Discovery of Human Remains. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the project contractor shall immediately halt work and contact the Riverside County Coroner to evaluate the discovery. The contractor shall also notify March Air Reserve Base (ARB) and March Joint Powers Authority (JPA). No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the Native American Heritage Commission (NAHC) within 24 hours. In accordance with California Public Resources Code Section 5097.98, NAHC shall immediately notify those persons it believes to be the most likely descendants (MLDs) of the deceased Native American. The MLDs shall complete their inspection within 48 hours of being granted access to the site. The MLDs shall then determine, in consultation with the property owner or their representative, the disposition of the human remains. Authorization to resume construction shall be given by March ARB and March JPA only after consultation with the MLDs and shall include implementation of all appropriate measures to protect any possible burial sites and/or human remains.

3.4.6 Level of Significance after Mitigation

No impact would occur relating to the Proposed Project causing a substantial adverse change in the significance of a historical resource.

With implementation of **MM-CUL-1**, which requires archaeological and tribal monitoring during all initial ground-disturbing activities, potential impacts to TCRs would be reduced to **less than significant**.

With implementation of **MM-CUL-2**, which requires that all construction work occurring within 100 feet of an archaeological resources find immediately stop until the on-site qualified archaeologist can evaluate the significance of the find, potentially significant impacts to archaeological resources would be reduced to **less than significant**.

With implementation of **MM-CUL-3**, the discovery of human remains would require handling in accordance with H&SC Section 7050.5 and PRC Section 5097.98, which state that in the event that human remains are discovered during construction, construction activity must be halted and the area must be protected until consultation and treatment can occur as prescribed by law. With implementation of **MM-CUL-3**, potentially significant impacts to human remains would be reduced to **less than significant**.

3.4.7 Cumulative Effects

Historical Resources

The geographical area evaluated for cumulative impacts to historical resources encompasses areas within the jurisdictions in the vicinity of the project site, including March JPA, the County of Riverside, and the Cities of Perris, Moreno Valley, and Riverside. As future growth occurs within the jurisdictions in the project vicinity, impacts to historical resources could occur due to the substantial historical-age resources known to occur in the area. The Project APE was surveyed for cultural resources relative to historical and archaeological resources. As discussed in Section 3.4.1, a pedestrian field survey of the Proposed Project's APE was conducted, and a Historic Properties Report was prepared by CRM TECH (Appendix E).

According to CEQA, the importance of cultural resources comes from their research value and the information that they contain. Therefore, the issue that must be explored in a cumulative analysis is the potential cumulative loss of that information. No historical resources within the APE were found eligible for inclusion in the NRHP or the CRHR. As a result of the historic significance evaluation, Site 33-024853 (Drainage Channel) and Sites CRM TECH 3611-1H and CRM TECH 3611-2H (Taxiways A and G) were found ineligible under all NRHP and CRHR designation criteria. No other potential historic properties or historical resources were identified through the various avenues of research. As such, the Proposed Project was determined to result in no impact on historical resources.

A cumulative impact, in terms of historical resources, refers to the collective potential effect on historical resources due to modern or recent historical land use, that result from human activity. Considering the Proposed Project would have no impact on historical resources, **no cumulatively considerable impacts** related to historical resources would occur.

Archaeological Resources

No archaeological resources were observed with the APE. In the unlikely event that unanticipated archaeological resources are encountered during ground-disturbing activities, **MM-CUL-2** requires that all construction work occurring within 100 feet of the find shall immediately stop until the on-site qualified archaeologist can evaluate the significance of the find, which would reduce potentially significant impacts to archaeological resources to less-than-significant levels.

The cumulative projects listed in Table 3-1, Cumulative Projects (see the introduction to Chapter 3, Environmental Analysis), have the potential to result in discovery of unknown or subsurface archaeological resources of unknown significance, similar to the Proposed Project. Cumulative projects located in fully developed areas would have a low chance of accidental discoveries of unknown archaeological resources due to previous grading and development likely having removed, preserved, or destroyed archaeological resources that previously existed within the sites. However, because the Proposed Project and other projects identified within the cumulative impact study area are primarily mitigated by the collection and curation of information and the preservation of the most important resources, adequate mitigation has occurred for in situ appreciation of and access to information regarding those sites for future generations. This reduces the potential for cumulative effects from implementing the Proposed Project improvements. Therefore, implementation of the Proposed Project, in addition to the related projects identified in Table 3-1, **would not result in cumulatively considerable impacts** to archaeological resources.

Tribal Cultural Resources

Similar to archaeological resources, cumulative impacts to TCRs would result from an aggregate of disturbance and loss of Native American artifacts. Projects located in the cumulative projects area would have the potential to result in an impact to TCRs from grading, excavation, or other ground-disturbing activities. Each of the cumulative projects would be required to comply with applicable laws for the proper handling of TCRs; therefore, a potentially significant cumulative impact would not occur. With implementation of **MM-CUL-1**, which requires tribal monitoring during all initial ground-disturbing activities, potential impacts to TCRs would be reduced to less than significant. Therefore, implementation of the Proposed Project, in addition to the related projects identified in Table 3-1, **would not result in cumulatively considerable impacts** to TCRs.

Human Remains

Similar to cumulative impacts on archaeological resources, cumulative impacts to human remains would result from an aggregate of disturbance and loss of Native American remains. Projects located in the cumulative projects area would have the potential to result in an impact associated with human remains from grading, excavation, or other ground-disturbing activities. Each of the cumulative projects would be required to comply with applicable laws for the proper handling of human remains; therefore, a potentially significant cumulative impact would not occur. The Proposed Project is also subject to regulations addressing discovery of human remains and would implement **MM-CUL-3**. Therefore, implementation of the Proposed Project, in addition to the related projects identified in Table 3-1, **would not result in cumulatively considerable impacts** to human remains.

3.4.8 References Cited

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SOURCE: CRM Tech 2020

FIGURE 3.4-1

Area of Potential Effects for Cultural Resources

Meridian D-1 Gateway Aviation Center Project

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3.5 Energy

This section describes the existing conditions related to energy within the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, evaluates potential impacts from the implementation of the Proposed Project, and identifies mitigation measures for the Proposed Project. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Meridian D-1 Gateway Aviation Center Air Quality Impact Analysis (Air Quality Report) prepared by Urban Crossroads in April 2024 (Appendix B-1)
- Meridian D-1 Gateway Aviation Center Energy Analysis (Energy Analysis) prepared by Urban Crossroads in January 2023 (updated in March 2024; Appendix F)

Other sources consulted are listed in Section 3.5.8, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March Joint Powers Authority (JPA). The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the holiday season (i.e., late November through late December), increased aircraft operations would be anticipated (estimated to result in an additional 128 two-way flights [256 flight operations] over a 4-week period); however, the maximum annual aircraft operations would not exceed the currently available civilian air cargo operations capacity under the Joint Use Agreement.¹ Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.). As there is no proposed tenant at this time, the proposed flight operations scenarios reflect a fleet consisting of Boeing 767-300 aircraft, which is a typical plane utilized in air cargo operations.

3.5.1 Existing Conditions

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2019, released by the U.S. Energy Information Administration's California State Profile and Energy Estimates in 2021 and identified California's annual consumption of approximately (EIA 2021a):

- 7,802 trillion British thermal units of energy
- 662 million barrels of petroleum
- 2,144 billion cubic feet of natural gas
- 1 million short tons of coal

The California Energy Commission (CEC) Transportation Energy Demand Forecast 2018–2030 was released to support the 2017 Integrated Energy Policy Report (IEPR). The Transportation Energy Demand Forecast lays out graphs and data supporting CEC's projections of California's future transportation energy demand. The projected

¹ The current capacity of annual civilian air cargo operations is approximately 21,000 flight operations.

inputs consider expected variable changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand include the following (CEC 2018):

- Gasoline demand in the transportation sector is expected to decline from approximately 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030.
- Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.7 billion diesel gallons in 2015 to approximately 4.7 billion in 2030.

Data from the Department of Energy states that approximately 3.9 billion gallons of diesel fuel were consumed in 2017 (Alternate Fuels Data Center 2021). The most recent data provided by the U.S. Energy Information Administration for energy use in California by demand sector is as follows (EIA 2021a):

- Approximately 39.3% from transportation uses
- Approximately 23.2% from industrial uses
- Approximately 18.7% from residential uses
- Approximately 18.9% from commercial uses

In 2020, total electric system generation for California was 272,576 gigawatt-hours. California's massive in-state electricity generation system generated approximately 190,913 gigawatt-hours, which accounted for approximately 70% of the electricity it uses; the rest was imported from the Pacific Northwest (15%) and the U.S. Southwest (15%). Natural gas is the main source for electricity generation, at 42.9% of the total in-state electric generation system power (CEC 2019a).

An updated summary of and context for energy consumption and energy demands within the state is presented in California State Profile and Energy Estimates, Quick Facts, excerpted below. As indicated, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient (EIA 2021b):

- California was the seventh-largest producer of crude oil among the 50 states in 2019, and, as of January 2020, it ranked third in oil refining capacity. Foreign suppliers, led by Saudi Arabia, Iraq, Ecuador, and Colombia, provided more than half of the crude oil refined in California in 2019.
- California is the largest consumer of both jet fuel and motor gasoline among the 50 states and accounted for 17% of the nation's jet fuel consumption and 11% of motor gasoline consumption in 2019. The state is the second-largest consumer of all petroleum products combined, accounting for 10% of the U.S. total. In 2018, California's energy consumption was the second highest among the states, but its per capita energy consumption was the fourth-lowest due in part to its mild climate and its energy efficiency programs.
- In 2019, California was the nation's top producer of electricity from solar, geothermal, and biomass energy and the state was second in the nation in conventional hydroelectric power generation.
- In 2019, California was the fourth largest electricity producer in the nation, but the state was also the nation's largest importer of electricity and received about 28% of its electricity supply from generating facilities outside of California, including imports from Mexico.

The remainder of this discussion focuses on the sources of energy that are most relevant to the Proposed Project: electricity, natural gas, aircraft fuel, and transportation fuel for vehicle trips associated with the uses planned for the Proposed Project.

Electricity

Electricity is currently provided to the project site by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. According to CEC, approximately 81 billion kilowatt-hours (kWh) of electricity was used in SCE's service area in 2021 (CEC 2022a).

SCE receives electric power from a variety of sources. According to the 2020 SCE Power Content Label, eligible renewable energy accounts for 30.9% of SCE's overall energy resources, with geothermal resources at 5.5%, wind power at 9.4%, eligible hydroelectric sources at 0.8%, and solar energy at 15.1% (CEC 2022b). Within Riverside County, annual electricity use in 2021 was approximately 17 billion kWh per year (CEC 2022c).

Natural Gas

Natural gas would be provided to the project site by the Southern California Gas Company (SoCalGas). SoCalGas's service territory encompasses approximately 24,000 square miles and more than 500 communities. In the California Energy Demand mid-energy demand scenario, natural gas demand is projected to have an annual growth rate of 0.03% in SoCalGas's service territory. In 2024, the total natural gas capacity available is estimated to be approximately 5.4 billion cubic feet per day (California Gas and Electric Utilities 2022). This amount is approximately equivalent to 5.61 billion thousand British thermal units (kBTU) per day, or 56 million therms per day. Within Riverside County, annual natural gas consumption is approximately 430.8 million therms, or 1.18 million therms per day (CEC 2022d).

Transportation Energy Resources

The Proposed Project would generate additional vehicle trips and aircraft operations, with resulting consumption of energy resources, predominantly jet fuel, gasoline, and diesel fuel. The California Department of Motor Vehicles identified 35.8 million registered vehicles in California (DMV 2020), and those vehicles consume an estimated total of 17.4 billion gallons of fuel each year. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Proposed Project's patrons and employees via commercial outlets. The County of Riverside used approximately 972 million gallons of petroleum in 2022, with 719 million gallons in gasoline and 253 million gallons of diesel (CARB 2023a). Statewide fuel use was approximately 17.7 billion gallons in 2022, with 14.5 billion gallons of gasoline and 3.1 billion gallons of diesel (CARB 2023b). The U.S. Energy Information Administration estimated that jet fuel consumption in California was 3.475 billion gallons in 2022 (EIA 2023).

3.5.2 Relevant Plans, Policies, and Ordinances

Federal

Intermodal Surface Transportation Efficiency Act

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of intermodal transportation systems to maximize mobility and address national and local interests in air quality and energy. ISTEA contained factors that metropolitan planning organizations were to address in developing transportation plans and programs, including some energy-related factors. To meet the ISTEA requirements, metropolitan planning organizations adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

Transportation Equity Act for the 21st Century

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds on the initiatives established in the ISTEA legislation discussed above. TEA-21 authorizes highway, highway safety, transit, and other transportation efficiency programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of intelligent transportation systems to help improve operations and management of transportation systems and vehicle safety.

State

Integrated Energy Policy Report

Senate Bill (SB) 1389 (Bowen, Chapter 568, Statutes of 2002) requires CEC to prepare a biennial IEPR that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (California Public Resources Code Section 25301[a]). CEC prepares these assessments and associated policy recommendations every 2 years, with updates in alternate years, as part of the IEPR.

The 2021 IEPR was adopted on February 22, 2022, and continues to work toward improving electricity, natural gas, and transportation fuel energy use in California. The 2021 IEPR provides the results of CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the state is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs (CEC 2022e).

California Energy Efficiency Action Plan

CEC is responsible for preparing the Energy Efficiency Action Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Energy Efficiency Action Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the Energy Efficiency Action Plan identifies several strategies, including assistance to public agencies and fleet operators, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access (CEC 2019b).

California Code of Regulations Title 24, Part 6, Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR Part 6) were first adopted 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. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas (GHG) emissions. The CEC adopted the 2022 version of Title 24 on August 11, 2022 (2022 Energy Code), and this version became effective on January 1, 2023. The 2022 Energy Code focuses on four key areas in newly constructed homes and businesses:

- Encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units
- Establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking and electric vehicle charging options whenever they choose to adopt those technologies
- Expanding solar photovoltaic system and battery storage standards to make clean energy available on site and complement the state's progress toward a 100% clean electricity grid
- Strengthening ventilation standards to improve indoor air quality

The impact of climate change is accelerating, bringing an even greater need for buildings that are comfortable, efficient, and resilient. Each updated code guides the construction of buildings to better withstand extreme weather, lower energy costs, and reduce climate and air pollution.

Over the next 30 years, the 2022 Energy Code is expected to provide approximately \$1.5 billion in consumer benefits and reduce GHGs by 10 million metric tons, which is equivalent to taking nearly 2.2 million cars off the road for a year. Expanded adoption of new energy-efficient technologies will help reduce costs of the technology over time.

The Proposed Project would be required to comply with the applicable standards in place at the time plan check submittals are made. Under the current code, the following are required, among other items (Appendix F, Energy Analysis):

Nonresidential Mandatory Measures (Chapter 5)

- **Short-Term Bicycle Parking.** If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passersby, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- **Long-Term Bicycle Parking.** For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- **Designated Parking for Clean Air Vehicles.** In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- **Electric Vehicle (EV) Charging Stations.** New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is

contained in Table 5.106.5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty EV supply equipment for warehouses, grocery stores, and retail stores.

- **Outdoor Light Pollution Reduction.** Outdoor lighting systems shall be designed to meet the backlight, uplight, and glare ratings per Table 5.106.8 (5.106.8).
- **Construction Waste Management.** Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1., 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- **Excavated Soil and Land Clearing Debris.** 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reuse or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- **Recycling by Occupants.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- **Water Conserving Plumbing Fixtures and Fittings.** Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
 - **Water Closets.** The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
 - **Urinals.** The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
 - **Showerheads.** Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute (gpm) and 80 pounds per square inch (psi) (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gpm at 80 psi (5.303.3.3.2).
 - **Faucets and Fountains.** Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gpm at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gpm at 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gpm (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- **Outdoor Potable Water Uses in Landscaped Areas.** Nonresidential developments shall comply with a local water-efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance, whichever is more stringent (5.304.1).
- **Water Meters.** Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 square feet or for excess consumption where any tenant within a new building or within an addition that is projected to consume more than 1,000 gallons per day (5.303.1.1 and 5.303.1.2).
- **Outdoor Water Uses in Rehabilitated Landscape Projects Equal to or Greater than 2,500 Square Feet.** Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit shall comply with Section 5.304.2, Item 1 or 2 (5.304.3).

- **Commissioning.** For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

Assembly Bill 1493 Pavley Regulations and Fuel Efficiency Standards

California Assembly Bill (AB) 1493 (the Pavley standards), enacted on July 22, 2002, required the California Air Resources Board (CARB) to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed specifically at reducing GHG emissions, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

California's Renewables Portfolio Standard

First established in 2002 under SB 1078, California's Renewables Portfolio Standard (RPS) required retail sellers of electric services to increase procurement from eligible renewable resources to 20% of total retail sales by 2017. The program was accelerated in 2015 with SB 350, which mandated a 50% RPS by 2030. SB 350 includes interim annual RPS targets with 3-year compliance periods and requires 65% of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 was signed into law, which increases the RPS to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045 (CEC 2020). SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045.

Clean Energy and Pollution Reduction Act of 2015 (SB 350)

In October 2015, the California State Legislature approved, and the Governor signed, SB 350, which reaffirms California's commitment to reducing GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy-efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for EV charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 45% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utilities Commission, CEC, and local publicly owned utilities.
- Reorganize the California Independent Service Operator (CAISO) to develop more regional electricity transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

Local

March Joint Powers Authority General Plan

The Noise/Air Quality Element of the March JPA General Plan includes goals and policies that will be applied to the Proposed Project-related GHG emissions, which will also reduce energy consumption. Consistency with these goals and policies is discussed in Section 3.10, Land Use and Planning. The following goals and policies from the Noise/Air Quality Element apply to the Proposed Project (March JPA 1999):

Goal 3: Reduce air pollution through proper land use, transportation, and energy use planning.

Policy 3.4: Encourage ride share programs.

Goal 6: Reduce emissions associated with vehicle/engine use.

Policy 6.1: Reduce idling emissions by increasing traffic flow through synchronized traffic signals.

Policy 6.3: Encourage diversion of peak hour truck traffic, whenever feasible, to off-peak periods to reduce roadway congestion and associated emissions.

Policy 6.4: Work with Caltrans [California Department of Transportation] and traffic engineers to ensure that roadways and freeway on-ramps that are heavily utilized by trucks are designed to safely accommodate trucks.

Policy 6.5: Encourage trucks operating within March JPA Planning Area to maintain safety equipment and operate at safe speeds so as to reduce the potential for accidents which create congestion and related emissions.

Policy 6.6: Reduce vehicle emissions through improved parking design and management that provide for safe pedestrian access to and from various facilities.

Policy 6.8: Encourage the use of compressed natural gas, clean diesel and/or alternative fuels in engines.

Goal 7: Reduce emissions associated with energy consumption.

Policy 7.1: Support the use of energy-efficient equipment and design in the March JPA Planning Area for facilities and infrastructure.

Policy 7.2: Encourage incorporation of energy conservation features in development.

Policy 7.3: Support passive solar design in new construction.

Policy 7.4: Support recycling programs which reduce emissions associated with manufacturing and waste disposal.

Policy 7.5: Support drought-resistant vegetation in landscaping areas to reduce energy needed to pump water.

3.5.3 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's impacts on energy are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and, where applicable, the March JPA CEQA Guidelines (March JPA 2022). For the purposes of the energy analysis in this EIR, a significant impact would occur if the Proposed Project would do either of the following:

- ENG-1** Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- ENG-2** Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Approach and Methodology

This section is based on the Energy Analysis prepared for the Proposed Project (Appendix F) and on information from the Air Quality Report that was prepared for the Proposed Project (Appendix B-1). Please refer to those appendices for detailed information on the assumptions and inputs.

CalEEMod

In May 2022, the South Coast Air Quality Management District, in conjunction with the California Air Pollution Control Officers Association and other California air districts, released the California Emissions Estimator Model (CalEEMod) Version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources, as well as energy usage. Accordingly, this version of CalEEMod has been used to determine the Proposed Project's anticipated transportation and facility energy demands.

EMFAC2021

On May 2, 2022, the U.S. Environmental Protection Agency approved the 2021 version of the Emissions FACTor model (EMFAC2021) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California. CARB commonly uses the model to project changes in future emissions from on-road mobile sources. This energy analysis uses the different fuel types for each vehicle class from the annual EMFAC2021 emission inventory to derive the average vehicle fuel economy, which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Proposed Project construction and operational activities. For purposes of analysis, the 2023–2024 analysis years were used to determine the average vehicle fuel economy used throughout the duration of the Proposed Project.

AEDT

The Federal Aviation Administration (FAA) Aviation Environmental Design Tool (AEDT) was used to estimate aircraft fuel usage based on the flight operation characteristics during peak and non-peak seasons.

3.5.4 Impacts Analysis

Threshold ENG-1: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less-Than-Significant Impact.

Energy Source Impacts

Under existing conditions, the project site has negligible energy demands. Implementation of the Proposed Project would increase the demand for electricity and natural gas at the project site and increase petroleum consumption in the region during construction and operation. For operational energy use, the totals reflect 48 weeks of non-peak season usage and 4 weeks of peak season usage.

Electricity

Construction Use

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the Proposed Project. The 2022 National Construction Estimator identifies a typical power cost per 1,000 square feet of construction per month of \$2.41, which was used to calculate the Proposed Project's total construction power cost (Pray 2022). Based on information provided in the Air Quality Report, construction activities are anticipated to occur over the course of approximately 10 months (Appendix B-1). The total electricity usage during construction would be approximately 398,901 kWh and the total power cost of the on-site electricity usage during the construction of the Proposed Project is estimated to be \$52,938.13 (refer to Appendix F).

Operational Use

The Proposed Project building operations and project site maintenance activities would result in the consumption of electricity, which would be supplied to the project site by SCE. Electricity demands of the Proposed Project would result in 938,977 kWh per year of electricity use. The Proposed Project involves conventional industrial uses reflecting contemporary energy-efficient/energy-conserving designs and operational programs. The Proposed Project does not include uses that are inherently energy intensive, and the energy demands in total would be comparable to other industrial land use projects of similar scale and configuration. In addition, the Proposed Project would comply with the applicable Title 24 standards, which would ensure that Proposed Project's energy demands would not be inefficient, wasteful, or otherwise unnecessary. For these reasons, the electricity consumption of the Proposed Project would not be considered inefficient or wasteful.

Natural Gas

Construction Use

Natural gas is not anticipated to be required during construction of the Proposed Project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under “Petroleum.” Any minor amounts of natural gas that may be consumed as a result of Proposed Project construction would be substantially less than that required for Proposed Project operation and would have a negligible contribution to the Proposed Project’s overall energy consumption.

Operational Use

The Proposed Project’s operational natural gas use is estimated to be 3,451,866 kBtu per year of natural gas (Appendix F). The Proposed Project would consist of conventional industrial uses reflecting contemporary energy-efficient/energy-conserving designs and operational programs. The Proposed Project does not include uses that are inherently energy intensive, and the energy demands in total would be comparable to other industrial land use projects of similar scale and configuration. In addition, the Proposed Project would comply with the applicable Title 24 standards, which would ensure that the Proposed Project’s energy demands would not be inefficient, wasteful, or otherwise unnecessary. For these reasons, the natural gas consumption of the Proposed Project would not be considered inefficient or wasteful.

Petroleum

Construction Use

Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction of the Proposed Project. Proposed Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are provided in Section 3.2, Air Quality. Eight-hour daily use of all equipment was assumed. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hours per gallon, obtained from CARB’s 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (CARB 2018). For the purposes of this analysis, the calculations are based on all construction equipment being diesel powered, which is consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the region.² As presented in Table 3.5-1, construction off-road equipment activities for the Proposed Project would consume an estimated 42,458 gallons of diesel fuel.

Table 3.5-1. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Horsepower Hours per Day	Gallons
Demolition	9	4,643	4,267
Site preparation	9	4,643	4,267
Grading	9	6,397	11,066
Building construction	9	2,392	19,649

² Based on Appendix A of the CalEEMod User’s Guide, construction consists of several types of off-road equipment. Because the majority of the off-road construction equipment used for construction projects is diesel fueled, CalEEMod assumes that all equipment will operate on diesel fuel.

Table 3.5-1. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Horsepower Hours per Day	Gallons
Paving	6	1,276	2,966
Architectural coating	1	142	246
Total			42,458

Source: Appendix F.

In addition to fuel consumed by construction equipment, fuel would be consumed during the construction phase by construction worker vehicles, hauling truck trips, and vendors commuting to and from the site.

With respect to estimated VMT for the Proposed Project, construction worker trips would generate an estimated 265,216 VMT during the approximately 10 months of construction (Appendix B-1). Based on CalEEMod methodology, it was assumed that 50% of all vendor trips would be from light-duty automobiles, 25% would be from light-duty trucks type 1,³ and 25% would be from light-duty trucks type 2.⁴ Data regarding project-related construction worker trips were based on CalEEMod defaults used in the Air Quality Report (Appendix B-1).

Vehicle fuel efficiencies for light-duty automobiles, light-duty trucks type 1, and light-duty trucks type 2 were estimated using information generated within CARB's EMFAC2021. EMFAC2021 was run for the light-duty automobile, light-duty truck type 1, and light-duty truck type 2 vehicle classes within the California subarea for the 2023 and 2024 calendar years.

As generated by EMFAC2021, an aggregated fuel economy of light-duty automobiles ranging from model year 1974 to model years 2023 and 2024 are estimated to have fuel efficiencies of 30.60 miles per gallon (mpg) and 31.51 mpg, respectively. The EMFAC2021 aggregated fuel economy of light-duty trucks type 1 ranging from model year 1974 to model years 2023 and 2024 are estimated to have fuel efficiencies of 24.15 mpg and 24.62 mpg, respectively. The EMFAC2021 aggregated fuel economy of light-duty trucks type 2 ranging from model year 1974 to model years 2023 and 2024 are estimated to have fuel efficiencies of 23.88 mpg and 24.57 mpg, respectively. As shown in Table 3.5-2, it is estimated that 9,781 gallons of fuel would be consumed related to construction worker trips during full construction of the Proposed Project.

Table 3.5-2. Construction Worker Vehicle Fuel Consumption

Phase	Vehicle Type	Trips per Day	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (Gallons)
Demolition	LDA	12	3,744	30.60	123
	LDT1	6	1,887	24.15	78
	LDT2	6	1,887	23.88	79
Site preparation	LDA	12	3,744	30.60	
	LDT1	6	1,887	24.15	78
	LDT2	6	1,887	23.88	79

³ Vehicles in the light-duty trucks type 1 category have a gross vehicle weight rating of less than 6,000 pounds and equivalent test weight of less than or equal to 3,750 pounds.

⁴ Vehicles in the light-duty trucks type 2 category have a gross vehicle weight rating of less than 6,000 pounds and equivalent test weight between 3,751 and 5,750 pounds.

Table 3.5-2. Construction Worker Vehicle Fuel Consumption

Phase	Vehicle Type	Trips per Day	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (Gallons)
Grading	LDA	12	7,104	30.6	232
	LDT1	6	3,552	24.15	147
	LDT2	6	3,552	23.88	149
Building construction	LDA	38	106,856	30.60 (2023) 31.51 (2024)	3,463
	LDT1	19	53,429	24.15 (2023) 24.62 (2024)	2,200
	LDT2	19	53,429	23.88 (2023) 24.57 (2024)	2,219
Paving	LDA	8	6,364	30.60	205
	LDT1	4	3,182	24.15 (2023) 24.62 (2024)	130
	LDT2	4	3,182	23.88 (2023) 24.57 (2024)	131
Architectural coating	LDA	8	4,736	30.60	150
	LDT1	4	2,368	24.62	96
	LDT2	4	2,368	24.57	96
Total^a					9,781

Source: Appendix F; Appendix B-1.

Notes: VMT = vehicle miles traveled; mpg = miles per gallon; LDA = light-duty automobile; LDT1 = light-duty truck type 1; LDT2 = light-duty truck type 2.

^a Numbers may not sum precisely due to rounding.

With respect to estimated VMT, construction vendor and hauling trips (vehicles that deliver materials to the site during construction) would generate an estimated 142,202 VMT along area roadways for the Proposed Project over the duration of construction activity (Appendix B-1). It was assumed that 50% of vendor trips would be from medium-heavy-duty trucks, 50% of vendor trips would be from heavy-heavy-duty trucks, and 100% of hauling trips would be from heavy-heavy-duty trucks. These assumptions are consistent with the CalEEMod defaults used within the Air Quality Report (Appendix B-1). Vehicle fuel efficiencies for medium-heavy-duty trucks and heavy-heavy-duty trucks were estimated using information generated within EMFAC2021. EMFAC2021 was run for the medium-heavy-duty truck and heavy-heavy-duty truck vehicle classes within the California subarea for the 2023 and 2024 calendar years.

As generated by EMFAC2021, an aggregated fuel economy of medium-heavy-duty trucks ranging from model year 1974 to model years 2023 and 2024 are estimated to have fuel efficiencies of 8.40 mpg and 8.47 mpg, respectively. As generated by EMFAC2021, an aggregated fuel economy of heavy-heavy-duty trucks ranging from model year 1974 to model years 2023 and 2024 are estimated to have fuel efficiencies of 6.04 mpg and 6.12 mpg, respectively. As shown in Table 3.5-3, it was estimated that 4,959 gallons of fuel would be consumed related to construction vendor trips during full construction of the Proposed Project.

Table 3.5-3. Construction Vendor Vehicle Fuel Consumption

Phase	Vehicle Type	Trips per Day	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (Gallons)
Demolition	MHDT	0	0	8.40	0
	HHDT	0	0	6.04	0
Site preparation	MHDT	2	347	8.40	41
	HHDT	2	347	6.04	57
Grading	MHDT	3	979	8.40	117
	HHDT	3	979	6.04	162
Building construction	MHDT	10	15,504	8.40 (2023) 8.47 (2024)	1,841
	HHDT	10	15,504	6.04 (2023) 6.12 (2024)	2,557
Architectural coating	MHDT	2	653	8.40 (2023) 8.47 (2024)	77
	HHDT	2	653	6.12	107
Total					4,959

Source: Appendix F.

Notes: VMT = vehicle miles traveled; mpg = miles per gallon; MHDT = medium-heavy-duty truck; HHDT = heavy-heavy-duty truck.

As shown in Table 3.5-4, it was estimated that 17,747 gallons of fuel would be consumed related to construction haul trips during full construction of the Proposed Project. **Mitigation Measure (MM) AQ-2** (Construction Requirements) requires all heavy-duty trucks hauling onto the project site to be model year 2014 or later, which would improve fuel efficiency (refer to Section 3.2.5, Mitigation Measures, in Section 3.2, Air Quality, for the full text of air quality mitigation measures). However, fuel reduction from **MM-AQ-2** cannot be quantified and is not included in the analysis.

Table 3.5-4. Construction Haul Vehicle Fuel Consumption

Phase	Vehicle Type	Trips per Day	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (Gallons)
Demolition	HHDT	24	3,386	6.04	560
Grading	HHDT	391	103,850	6.04	17,186
Total					17,747

Source: Appendix F.

Notes: VMT = vehicle miles traveled; mpg = miles per gallon; HHDT = heavy-heavy-duty truck.

To summarize, construction worker trips for the full construction period of the Proposed Project would result in an estimated fuel consumption of 9,781 gallons of fuel. Additionally, fuel consumption from construction vendor and hauling trips (medium-heavy-duty trucks and heavy-heavy-duty trucks) would total approximately 22,706 gallons. Construction worker, vendor, and haul trips would represent a “single-event” gasoline fuel demand and would not require ongoing or permanent commitment of fuel resources for this purpose.

There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities, or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Proposed Project would therefore not result in inefficient, wasteful, or unnecessary consumption of fuel. Additionally, **MM-AQ-2** (Construction Requirements) requires the use of electric-powered hand tools, forklifts, and pressure washers, to the extent feasible, along with a designated charging area, which would improve fuel efficiency. However, fuel reduction from **MM-AQ-2** cannot be quantified and is not included in the analysis.

Construction contractors would be required to comply with applicable CARB regulations regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures. For example, CCR Title 13, Motor Vehicles, Section 2449(d)(2), Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(2) requires medium and large fleets to adopt a written idling policy informing operators that idling is limited to 5 consecutive minutes or less. Equipment rental agreements must also inform renters/lessees of this idling restriction. In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to 5 minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by county building officials and/or in response to citizen complaints. Additionally, **MM-AQ-2** (Construction Requirements) limits construction equipment idling to no longer than 3 minutes, which would improve fuel efficiency. However, fuel reduction from **MM-AQ-2** cannot be quantified and is not included in the analysis.

In general, construction processes promote conservation and efficient use of energy by reducing raw material demands, with related reduction in energy demand associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials, as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. For these reasons and those noted above, construction of the Proposed Project would not result in the wasteful or inefficient use of fuel, and the Proposed Project would result in **less-than-significant** impacts during Project construction regarding the potential for wasteful, inefficient, or unnecessary consumption of energy resources.

Operational Use

Energy consumption in support of or related to Proposed Project operations would include transportation energy demands (energy consumed by passenger cars [employees] and trucks accessing the project site, and aircraft fuel usage associated with aircraft accessing the project site). **MM-AQ-3** (Improved Energy Efficiency and Water Reduction) requires the annual provision of information to employees and truck drivers about electric vehicle charging availability, alternate transportation opportunities for commuting, the

Voluntary Interindustry Commerce Solutions “Empty Miles” program to improve goods trucking efficiencies, and efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. **MM-AQ-4** (Truck Requirements) limits truck idling to 3 minutes. **MM-AQ-5** (Commute Trip Reduction) requires any tenant agreement to include 5% reserved parking spaces for carpools and vanpools, provision of short- and long-term bicycling parking facilities and “end-of-trip” facilities, on-site food vending or kitchen equipment and mail facilities, and establishment of a rideshare program with financial incentives. **MM-GHG-1** (Installation of EV Charging Stations) requires that the Project include the circuitry, capacity, and equipment for EV charging stations in accordance with Tier 2 of the 2022 California Green Building Standards Code (CALGreen). However, fuel reduction from **MM-AQ-3** through **MM-AQ-5** and **MM-GHG-1** cannot be quantified and is not included in the analysis.

Employees and Trucks

Energy that would be consumed by Proposed Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the project site. The vehicle categories identified in Table 3.5-5 are based on CalEEMod defaults, as a conservative measure, and may include vehicle categories not specifically intended to access the project site.

Table 3.5-5. Petroleum Consumption - Operation

Use Classification	Vehicle Type	Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (Gallons)
Employees	LDA	3,580,491	31.5	113,644
	LDT1	289,985	24.62	11,777
	LDT2	1,423,828	24.57	57,944
	MDV	982,512	15.52	63,324
	MCY	144,748	15.52	9,329
<i>Subtotal Employees</i>				<i>256,018</i>
Truck trips	LHDT1	210,905	16.16	13,050
	LHDT2	59,544	15.52	3,838
	MHDT	905,789	8.47	106,898
	HHDT	1,485,324	6.12	242,664
<i>Subtotal Trucks</i>				<i>366,450</i>
Total Motor Vehicles				622,468
<i>Aircraft</i>				<i>1,723,276</i>
Total Petroleum Fuel Use				2,345,744

Source: Appendix F.

Notes: VMT = vehicle miles traveled; mpg = miles per gallon; LDA = light-duty automobile; LDT1 = light-duty truck type 1; LDT2 = light-duty truck type 2; MDV = medium-duty vehicle (passenger truck); MCY = motorcycle; LHDT1 = light-heavy-duty truck type 1; LHDT2 = light-heavy-duty truck type 2; MHDT = medium-heavy-duty truck; HHDT = heavy-heavy-duty truck.

With respect to estimated VMT and based on the trip frequency and trip length methodologies cited in the Proposed Project’s Air Quality Report, the Proposed Project would generate an estimated 9,083,126 VMT (Appendix B-1). As shown in Table 3.5-5, it is estimated that 622,468 gallons of fuel would be consumed related to annual vehicular trips generated by operation of the Proposed Project. As noted previously, annual diesel and gasoline fuel use in 2022 in Riverside County was estimated at 972 million gallons and

statewide fuel use was estimated at 17.7 billion gallons (CARB 2023a, 2023b). The estimated operational fuel use would represent a small fraction of the annual countywide and statewide use.

Aircraft

As shown in Attachment A (MARB Cargo Emissions Summary) to Appendix 5.5 (Aircraft-Related Operational Emissions) of Appendix B-1, comparing Preferred Flight Operations Scenario Peak vs Non-Peak Emissions, FAA's AEDT is used to generate the estimated fuel use in pounds per year (lb/year) for each scenario. The Peak Scenario daily fuel use of 3,697.8 lb is multiplied by 7 days per week and by 4 weeks to arrive at 103,538.4 lb per year.⁵ The jet fuel density, 6.7 lb per gallon, is applied to the total annual pounds to arrive at an estimated 15,453.49 gallons of fuel per year for the Peak Scenario. Similarly, the Non-Peak Scenario daily fuel use of 34,054.8 lb is multiplied by 7 days per week and by 48 weeks to arrive at 11,442,412.8 lb per year.⁵ The jet fuel density, 6.7 lb per gallon, is applied to the total annual pounds to arrive at an estimated 1,707,822.8 gallons of fuel per year for the Non-Peak Scenario. The total fuel use for the Project would be 1,723,276 gallons of jet fuel for annual Boeing 767-300 operations (Appendix F).

Operational Fuel Use Summary

Annual vehicular trips and related VMT and aircraft generated by operation of the Proposed Project would result in an estimated 2,345,744 gallons of fuel usage (Appendix F).

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Proposed Project would be consistent with other industrial uses of similar scale and configuration, as reflected in the Institute of Transportation Engineers' Trip Generation Manual (10th Edition) and CalEEMod. As such, Proposed Project operations would not result in excessive or wasteful vehicle trips or VMT, nor would operations cause excess or wasteful vehicle energy consumption compared to other industrial land uses.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demand per VMT. The location of the project site next to regional and local roadway systems would tend to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Proposed Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code (CALGreen) and County of Riverside requirements, the Proposed Project would promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations. As supported by the preceding discussions, the Proposed Project's transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Summary

As supported by the preceding analyses, the Proposed Project's construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. The Proposed Project would therefore not cause or result in the need for additional energy-producing or transmission facilities, and the Proposed Project would result in a **less-than-significant** impact regarding the potential to be wasteful or

⁵ The AQ/GHG reports have conservatively assumed operation would occur 7 days per week, although it would operate for only 6 days per week; as such, the fuel estimate provided is also a conservative assumption.

inefficient with energy use or to consume unnecessary energy resources during construction and operation of the Proposed Project. In addition, mitigation measures incorporated to address air quality would have the co-benefit of further reducing energy demand.

Threshold ENG-2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less-Than-Significant Impact.

Potential to Conflict with Applicable State and Local Plans

Intermodal Surface Transportation Efficiency Act

Transportation and access to the project site would be provided by local and regional roadway systems. The Proposed Project would not interfere with or otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because the Southern California Association of Governments (SCAG) is not planning intermodal facilities on or through the project site. Thus, the Proposed Project would not conflict with the ISTEA.

TEA-21

The project site is located along major transportation corridors with immediate access to the Interstate freeway system. The site selected for the Proposed Project facilitates access, acts to reduce VMT, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The Proposed Project supports the strong planning processes emphasized under TEA-21. The Proposed Project would therefore not conflict with and would not otherwise interfere with or obstruct implementation of TEA-21.

Integrated Energy Policy Report

Electricity would be provided to the Proposed Project by SCE. SCE's Clean Power and Electrification Pathway white paper states that SCE's policies build on existing state programs and policies, which would include the 2021 IEPR. As such, the Proposed Project would not conflict with, and would not otherwise interfere with or obstruct implementation of, the goals presented in the 2021 IEPR.

California Energy Efficiency Plan

The project site is located along major transportation corridors with immediate access to the Interstate freeway system. The site selected for the Proposed Project would facilitate access, take advantage of existing infrastructure systems, and promote land use compatibilities through the introduction of a gateway air freight cargo center on a site designated for Aviation (AV) uses. The Proposed Project therefore supports urban design and planning processes identified under the California Energy Efficiency Plan and would not conflict with and/or otherwise interfere with or obstruct implementation of the California Energy Efficiency Plan.

California Code of Regulations Title 24, Part 6, Energy Efficiency Standards

The 2022 version of Title 24 was adopted by CEC and became effective on January 1, 2023. The Proposed Project would comply with the current Title 24 standards in place at the time building permits are approved. As such, the Proposed Project would not conflict with Title 24 Standards.

Assembly Bill 1493

AB 1493 is not applicable to the Proposed Project because it is a statewide measure establishing vehicle emissions standards. No feature of the Proposed Project would interfere with implementation of the requirements of AB 1493.

Renewables Portfolio Standard

California's RPS is not applicable to the Proposed Project because it is a statewide measure that establishes a renewable energy mix. No feature of the Proposed Project would interfere with implementation of the requirements under the RPS.

Senate Bill 350

The Proposed Project would use energy from SCE, which has committed to diversifying its portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Proposed Project would interfere with implementation of SB 350. Additionally, the Proposed Project would be designed and constructed to implement energy-efficiency measures for new industrial developments and would include several measures designed to reduce energy consumption.

March JPA General Plan

The Proposed Project would comply with the policies set forth in the March JPA General Plan by reducing vehicle trips and VMT, increasing the use of alternative fuel vehicles, and improving energy efficiency. A detailed analysis of the Proposed Project's potential to conflict with the March JPA General Plan is provided in Table 3.10-4 of Section 3.10, Land Use and Planning. As detailed in Section 3.10, the Proposed Project would not conflict with any energy-related policies of the March JPA General Plan.

Riverside County Climate Action Plan

The County of Riverside (County) adopted its updated Climate Action Plan (CAP) on December 17, 2019. The CAP was designed under the premise that the County, and the community it represents, is uniquely capable of addressing emissions associated with sources under the County's jurisdiction, and that the County's emission reduction efforts should coordinate with the state strategies of reducing emissions to accomplish these reductions in an efficient and cost-effective manner. The County plans to reduce community-wide emissions to 3,576,598 MT CO_{2e} per year by 2030 (County of Riverside 2019). The Proposed Project is not subject to the Riverside County CAP; however, because the CAP represents a regional plan designed to improve energy efficiencies and increase renewable energy, the Proposed Project's consistency with the CAP is provided in Section 3.7, Greenhouse Gas Emissions, for informational purposes only to illustrate how the Project has been designed to reduce greenhouse gas emissions.

To evaluate consistency with the CAP, the County provides screening tables to aid in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated into development projects. These measures often have the co-benefit of reducing energy use. As discussed in Section 3.7 of this EIR, the Proposed Project was found to achieve the 100 points that determine consistency with the CAP.

Summary

The Proposed Project would not conflict with or obstruct implementation of the following: ISTEPA; TEA-21; 2021 IEPR; California Energy Efficiency Plan; 24 CCR, Part 6, Energy Efficiency Standards; AB 1493; RPS; SB 350; and the March JPA General Plan, and impacts would be **less than significant**.

3.5.5 Mitigation Measures

None are required. However, the following mitigation measures relating to air quality and GHG emissions have been evaluated for feasibility and are also incorporated herein to further reduce the less than significant impacts related to energy. These measures are provided in full in Section 3.2 (Air Quality) and Section 3.7 (Greenhouse Gas Emissions).

- **MM-AQ-2 (Construction Requirements)**
- **MM-AQ-3 (Improved Energy Efficiency and Water Reduction)**
- **MM-AQ-4 (Truck Requirements)**
- **MM-AQ-5 (Commute Trip Reduction)**
- **MM-GHG-1 (Installation of EV Charging Stations)**

3.5.6 Level of Significance after Mitigation

The Proposed Project would result in a **less-than-significant** impact regarding the potential to result in wasteful, inefficient, or unnecessary consumption of energy resources during Proposed Project construction or operation.

The Proposed Project would result in a **less-than-significant** impact regarding the potential to conflict with a state or local plan for renewable energy or energy efficiency.

3.5.7 Cumulative Effects

Cumulative projects that could combine with the Proposed Project's impacts, thereby exacerbating impacts in the cumulative study area, include any project that could result in wasteful, inefficient, or unnecessary use of energy. Future projects would be subject to CEQA and would require an energy analysis; consistency with existing plans and policies for renewable energy and energy efficiency; and implementation of control measures and mitigation, if necessary, to avoid wasteful, inefficient, or unnecessary consumption of energy resources. The Proposed Project would be designed to maximize energy performance, and over the lifetime of the Proposed Project, the fuel efficiency of the vehicles used by employees and commercial vehicles are expected to increase. CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and zero-emissions vehicles in California. Additionally, in response to SB 375, CARB adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by 2020, and 19% by 2035, for light-duty passenger vehicles in the planning area for SCAG. The 2020 Regional Transportation Plan, Connect SoCal, prepared by SCAG stated that the Sustainable Communities Strategy prepared as part of the Connect SoCal complies with the targets established by CARB. However, CARB's Draft 2022 Progress Report on California's Sustainable

Communities indicates that in 2019 SCAG had achieved only a 4% reduction in GHG per-capita emissions between 2005 and 2019. While the target has not been achieved, VMT reduction overall and technological improvements in fuel efficiencies will result in Proposed Project operations using a decreasing amount of petroleum over time. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time.

In summary, although the Proposed Project would increase petroleum use during operation as a result of employees commuting to the site, the use would be a small fraction of the statewide use and, due to efficiency increases, would diminish over time. Furthermore, the Proposed Project would minimize energy use from construction and operational activities through energy-reduction strategies pursuant to the Proposed Project's **MM-AQ-3 through MM-AQ-5** and **MM-GHG-1** (see Section 3.2, Air Quality, and Section 3.7, Greenhouse Gas Emissions). However, fuel reduction from implementation of **MM-AQ-3** through **MM-AQ-5** and **MM-GHG-1** cannot be quantified and is not included in the analysis. Therefore, the Proposed Project's contribution to cumulative impacts would not be cumulatively considerable, and cumulative impacts related to energy use would be **less than significant**.

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3.6 Geology and Soils

This section describes the existing geology and soils conditions of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Proposed Project. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Geotechnical Exploration, Proposed Gateway Aviation Center – Meridian Park D-1 SW of Heacock Street and Iris Avenue (Geotechnical Exploration), prepared by Leighton Consulting Inc. in May 2021, included as Appendix H of this EIR
- County of Riverside General Plan Safety Element (County of Riverside 2021)
- Paleontological Resources Assessment Report for the Gateway Aviation Center Project, prepared by CRM TECH in September 2020, included as Appendix I of this EIR

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March Joint Powers Authority (JPA). The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.6.1 Existing Conditions

Site Topography and Setting

The topography of the project site and surrounding area consists of relatively flat terrain with a gradual decline to the southeast. Project site elevations range from approximately 1,490 feet above mean sea level (amsl) to approximately 1,495 feet amsl in the northeast area. Past construction and maintenance activities associated with the aviation facilities and underground utility lines have disturbed much of the project site. Most of the area features open fields covered by dense, low-lying ruderal grasses and weeds, although some areas have been cleared of vegetation and portions of the project site are occupied by two taxiways, a paved apron, and various paved improvements located adjacent to the existing taxiway (see Figure 2-1, Existing Site Development).

Earth Materials

Based on the Geotechnical Exploration conducted by Leighton Consulting in 2021, on-site materials include the following units: Quaternary alluvium, older alluvium, and granitic bedrock. The Geotechnical Exploration also recorded undocumented fill located just east of the project site; however, the project footprint does not encompass these areas of fill. Descriptions of the on-site geologic units are provided in the following subsections (Appendix H).

Quaternary Alluvium

Younger alluvial materials were encountered throughout the project area from the surface to depths ranging from approximately 2.5 to 10 feet below ground surface (bgs). The younger alluvial materials generally consist of silty sand and lesser amounts of clayey sands to well-graded sands. The younger alluvium is expected to generally possess a low expansion potential (Appendix H).

Older Alluvium

Older alluvial soils were encountered in all borings. As encountered, these soils generally consist of medium-dense to very dense silty to clayey sand and localized layers of sandy silt to sandy clay. This older alluvium is expected to generally possess a low expansion potential and a collapse potential of up to 3.4% (Appendix H).

Granitic Bedrock

Bedrock was encountered at a depth of 40 feet bgs within the project site. As encountered in soil borings, the bedrock was moderately weathered and consisted of well-graded sand with silt and varying amounts of gravel (Appendix H).

Seismicity

Located in Southern California, the project site is within a seismically active region near active fault zones, including the San Andreas, San Jacinto, and Elsinore Fault Zones. Based on published geologic hazard maps, the site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, nor is it located within a County Fault Zone (Appendix H). As is common for Southern California, strong ground shaking can be expected at the site during moderate to severe earthquakes in this general region. Intensity of ground shaking at a given location depends primarily on earthquake magnitude, site distance from the source, and site response (soil type) characteristics. The seismic coefficients were calculated as part of the Geotechnical Exploration using an interactive U.S. Geological Survey (USGS) program, USGS Unified Hazard Maps, and soil/rock types identified through on-site soil borings (Appendix H).

Secondary Seismic Hazards

Ground shaking can induce secondary seismic hazards, such as liquefaction/lateral spreading, subsidence, soil collapse, soil expansion, and ground rupture, as discussed below.

Liquefaction/Lateral Spreading

Liquefaction occurs primarily in saturated, loose, fine- to medium-grained soils in areas where the groundwater table is within approximately 50 feet of the surface. Shaking causes the soils to lose strength and behave like a liquid. Excess water pressure is vented upward through fissures and soil cracks and can also result in a water-soil slurry flowing onto the ground surface. Liquefaction-related effects include loss of bearing strength, ground oscillations, lateral spreading, and flow failures or slumping (County of Riverside 2021). Lateral spreading is the lateral movement of gently to steeply sloping saturated soil deposits that is caused by earthquake-induced liquefaction. As ground acceleration and shaking duration increase during an earthquake, liquefaction potential increases.

Riverside County geologic hazards maps indicate that the site is not located in a zone of high liquefaction potential (Appendix H). Although groundwater was encountered in soil borings at a depth of approximately 20 and 14.5 feet bgs within the project site, liquefaction-induced or dynamic dry settlement is not expected to be a significant hazard

at this site due to the absence of near-surface saturated sand layers and underlying dense older alluvium and granitic bedrock. The analysis performed for the Geotechnical Exploration showed that dynamic settlement due to ground shaking was estimated to be less than 1 inch. This settlement would be expected to occur over a large area. As such, the seismic differential settlement is not expected to exceed 0.5 inches in a 40-foot horizontal distance for the proposed building (Appendix H).

Subsidence

Subsidence is the permanent collapse of the pore space within a soil or rock and downward settling of the earth's surface relative to its surrounding area. Subsidence can result from the extraction of water or oil, the addition of water to the land surface (a condition called "hydrocompaction"), or peat loss. The compaction of subsurface sediment caused by the withdrawal or addition of fluids can cause subsidence. Land subsidence can disrupt surface drainage; reduce aquifer storage; cause earth fissures; damage buildings and structures; and damage wells, roads, and utility infrastructure.

In unincorporated portions of Riverside County, land subsidence has been well documented. Most of the early documented cases of subsidence affected only agricultural land or open space. As urban areas have expanded, so too have the impacts of subsidence on structures for human occupancy. Ground subsidence and associated fissuring in unincorporated Riverside County has resulted from both falling and rising groundwater tables. In addition, many fissures have occurred along active faults that bound the San Jacinto Valley and the Elsinore Trough. Subsidence typically occurs throughout a susceptible valley. In addition, differential displacement and fissures occur at or near the valley margin and along faults. In the County of Riverside, the worst damage to structures as a result of regional subsidence may be expected at the valley margins. Alluvial valley regions are especially susceptible. However, according to the USGS Survey Areas of Land Subsidence in California map, there have been no recorded instances of subsidence in the project site associated with groundwater pumping, peat loss, or oil extraction (USGS 2020).

Collapsible Soils

Collapsible soils typically occur in recently deposited Holocene soils that were deposited in an arid or semi-arid environment. Soils prone to collapse are commonly associated with human-deposited fill, wind-laid sands, silts, alluvial fan sediments, and mudflow sediments deposited during flash floods. These soils typically contain minute pores and voids. The soil particles may be partially supported by clay or silt or chemically cemented with carbonates. When saturated, collapsible soils undergo a rearrangement of their grains and the water removes the cohesive (or cementing) material, resulting in a rapid substantial settlement. An increase in surface water infiltration, such as from irrigation, or a rise in the groundwater table, combined with the weight of a building or structure, can initiate settlement and cause foundations and walls to crack. In Riverside County, collapsible soils occur predominantly at the base of mountains, where loose, Holocene-age alluvial fan and wash sediments have been deposited during rapid runoff events. In addition, some windblown sands may be vulnerable to soil collapse. Typically, differential settlement of structures occurs when lawns or plantings are heavily irrigated in proximity to a structure's foundation (County of Riverside 2021). The results of the Geotechnical Exploration indicated that the on-site soils/alluvium in the eastern portion of the site are expected to possess a moderate collapse potential, with settlement of up to 4 inches across the site (Appendix H). Although the Geotechnical Exploration indicated up to 8 inches of settlement in Site 7, only the expansion of the existing access roadway to the south of the project site would slightly overlap with Site 7.

Expansive Soils

Expansive soils have a significant amount of clay particles that can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The occurrence of these soils is often associated with geologic units having marginal stability. Expansive soils can be widely dispersed and can be found in hillside areas and low-lying alluvial basins. Expansive soils are now routinely alleviated through Riverside County's implementation of the California Building Code (CBC) (County of Riverside 2021). Soils with an expansion index of 20 or greater are generally considered potentially expansive (CBC 2019). Based on the results of the Geotechnical Exploration, laboratory testing indicates that on-site soils generally possess a very low expansion potential, with an expansion index of less than 21. However, due to the silty to clayey sand, low expansive potential soils (expansion index less than 51) may be encountered within the project site (Appendix H).

Landslide

Slope failures include many phenomena that involve the downslope displacement and movement of material, triggered either by gravity or seismic forces. Exposed bedrock slopes may experience rockfalls, rockslides, rock avalanches, and deep-seated rotational slides, and soil slopes may experience soil slumps and rapid debris flows. Slope stability can depend on several complex variables, including the geology, structure, and amount of groundwater, as well as external processes such as climate, topography, slope geometry, and human activity. The factors that contribute to slope movements include those that decrease the resistance in the slope materials and those that increase the stresses on the slope. Slope failure can occur on slopes of 15% or less, but the probability is greater on steeper slopes that exhibit old landslide features such as scarps, slanted vegetation, and transverse ridges. Based on the relatively flat to gently sloping topography of the project site, and as indicated by the County of Riverside General Plan Safety Element, the project site is not located within an area that is subject to slope instability (County of Riverside 2021, Figure 3, Landslide Risk).

Paleontological Resources

Paleontological Sensitivity

Paleontological resources represent the remains of prehistoric life, exclusive of any human remains, and include the localities where fossils were collected and the sedimentary rock formations in which they were found. The defining character of fossils or fossil deposits is their geologic age, which is typically regarded as older than approximately 12,000 years. Sedimentary units that are paleontologically sensitive are those geologic units with a high potential to contain nonrenewable paleontological resources. More specifically, these are geologic units within which vertebrate fossils or invertebrate fossils have been determined by previous studies to be present or are likely to be present. These units include sedimentary formations that contain paleontological resources anywhere within their geographical extent and sedimentary rock units that are amenable to the preservation of fossils (Appendix I).

There are generally four categories of paleontological sensitivity for geologic units that might be impacted by a project, as listed below (Appendix I):

- **High Potential:** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- **Undetermined Potential:** Rock units for which little information is available concerning their paleontological content, geologic age, or depositional environment.

- **Low Potential:** Rock units that are poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances.
- **No Potential:** Rock units that have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

Paleontological Setting

The area of potential effects (APE) for paleontological resources consists of an approximately 79-acre footprint, as shown in Figure 3.6-1, Area of Potential Effects for Paleontological Resources, and discussed in further detail in Appendix I. The APE is bounded roughly by Heacock Street on the east, the March ARB Fire Department facility on the north, Taxiways A and G on the west, and an industrial warehouse and an air cargo center on the south. The APE lies in a portion of the Perris Block, which is defined as the region between the San Jacinto and Elsinore-Chino Fault Zones and consists of a series of tectonically controlled valleys and ridges. The Pliocene- and Pleistocene-age non-marine sedimentary rocks found filling the valley areas have produced vertebrate fossils, as well as plant and invertebrate fossil remains (Appendix I). Most of the APE features open fields covered by dense, low-lying ruderal grasses and weeds, although some areas have been cleared of vegetation. Existing development within the APE consists of two well extraction facilities, a former (now vacant) fire house constructed between 1978 and 1994, a paved taxiway and tarmac area associated with aviation uses, and various paved improvements next to the existing taxiway. The topsoil generally consists of fine- to medium-grained clayey loam that is reddish brown in color and mixed with some small rocks. No bedrock outcrops were observed within the APE. Past construction and maintenance activities associated with the aviation facilities and underground utility lines have disturbed much of the APE. The eastern portion of the APE shows evidence of underground power lines, as well as gas and water pipelines. An aboveground power transmission line runs north-south adjacent to a roadway, and several water wells are also located in that portion of the APE (Appendix I).

Methods of Analysis

Appendix I of this EIR documents the results of the records search provided by the Western Science Center in Hemet, California; a literature review performed by CRM TECH; and a field survey of the APE performed by CRM TECH on June 23, 2020.

Record Search Results

The Western Science Center found no known paleontological localities within the boundaries of the APE or within the 1-mile scope of the records search. However, numerous specimens have been reported in areas farther away from the APE from sediment lithologies similar to those that are known to occur in the vicinity of the project site. According to the Western Science Center, the APE lies atop very old alluvial fan deposits dating to the Early Pleistocene. These deposits are considered to be highly sensitive for paleontological resources. Therefore, the Western Science Center assigned the APE a high potential for containing paleontological resources (Appendix I).

Literature Review

The surface geology in the vicinity of the APE was mapped as Qal, or alluvium of recent (Holocene) age. More recently, however, the APE was mapped as Qvof_a, or very old alluvial fan deposits of Early Pleistocene age, described as well-dissected, well-indurated, reddish-brown sand deposits containing minor amounts of gravel. These sediments are attributed to nearby Mount Russell, which is composed of heterogeneous granitic rock (Appendix I).

Very old alluvial fan deposits are often elevated relative to surrounding Quaternary units. Although some of this sediment may represent debris flows, much of this unit here is thought to be stream deposited. Further, the portion of the Perris Block on which the APE lies consists of widespread exposures of basement in a series of interconnected alluviated valleys (valleys that have been at least partially filled with sand, silt, and mud by flowing water). This has created erosional surfaces throughout the surrounding low-lying areas of the Perris Block (Appendix I).

The Natural Resources Conservation Service mapped the surface soils in the vicinity of the APE as mainly Exeter sandy loam (EnA) and Monserate sandy loam (MmB), with some Hanford soils (HgA) and Greenfield soils (GyA). Exeter sandy loam is found within 0% to 2% slopes and to a depth of 20 to 40 inches bgs. This soil type covers more than 70% of the ground surface in the APE. Monserate sandy loam is found within 0% to 5% slopes and a depth of 20 to 39 inches bgs, which covers more than 20% of the ground surface in the APE. The rest of the APE (less than 8%) is covered by the Hanford and Greenfield soils; both of these occur on 0% to 2% slopes at 80 inches bgs. All these soil types are well-drained sandy loam alluvial soils derived from granite (Appendix I).

Field Survey

During the field survey, no evidence of any paleontological resources was observed on the ground surface throughout the APE. The surface soils within March ARB have been extensively disturbed by past construction and military activities since the establishment of the first version of the base, the Alessandro Flying Training Field, in 1918. Today, the presence of a drainage channel, the taxiways, and the underground utility lines within the APE indicates prior disturbances to the surface and subsurface sediments (Appendix E, Historic Properties Report, and Appendix I, Paleontological Resources Report).

3.6.2 Relevant Plans, Policies, and Ordinances

Federal

Occupational Safety and Health Administration Regulations

Excavation and trenching are among the most hazardous construction operations. The Occupational Safety and Health Administration (OSHA) Excavation and Trenching Standard, Title 29 of the Code of Federal Regulations, Part 1926(P), covers requirements for excavation and trenching operations. OSHA requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.

State

California Building Standards Code

The state regulations protecting structures from geo-seismic hazards are contained in the CBC as codified in Title 24 of the California Code of Regulations (24 CCR Part 2), which is updated every 3 years. These regulations apply to public and private buildings in the state. Until January 1, 2008, the CBC was based on the then-current Uniform Building Code and contained additions, amendments, and repeals specific to building conditions and structural requirements of the State of California. The 2022 CBC, effective January 1, 2023, is based on the 2021 International Building Code and enhances the sections dealing with existing structures. Seismic-resistant construction design is required to meet more stringent technical standards than those set by previous versions of the CBC.

Chapters 16 and 16A of the 2022 CBC include structural design requirements governing seismically resistant construction, including factors and coefficients used to establish seismic site classes and seismic occupancy categories for the soil/rock at the building location and the proposed building design. Chapters 18 and 18A include the requirements for foundation and soil investigations (Sections 1803 and 1803A); excavation, grading, and fill (Sections 1804 and 1804A); damp-proofing and water-proofing (Sections 1805 and 1805A); allowable load-bearing values of soils (Sections 1806 and 1806A); the design of foundation walls, retaining walls, embedded posts and poles (Sections 1807 and 1807A), and foundations (Sections 1808 and 1808A); and design of shallow foundations (Sections 1809 and 1809A) and deep foundations (Sections 1810 and 1810A). Chapter 33 of the 2022 CBC includes requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes (Section 3304).

Construction activities are subject to occupational safety standards for excavating and trenching, as specified in the California Occupational Safety and Health Administration (Cal/OSHA) regulations (8 CCR Division 1) and in Chapter 33 of the CBC. These regulations specify the measures to be used for excavation and trench work where workers could be exposed to unstable soil conditions. The Proposed Project would be required to employ these safety measures during excavation and trenching.

California Health and Safety Code

Sections 17922 and 17951–17958.7 of the California Health and Safety Code require cities and counties to adopt and enforce the current edition of the CBC, including a grading section. Volume II of the CBC addresses select geologic hazards.

California Occupational Safety and Health Administration Regulations

Cal/OSHA has responsibility for implementing federal rules relevant to worker safety, including slope protection, during construction excavations in the state. Cal/OSHA's requirements are more restrictive and protective than federal OSHA standards. Division 1, Chapter 4, Division of Industrial Safety, of CCR Title 8, covers requirements for excavation and trenching operations, as well as safety standards whenever employment exists in connection with the construction, alteration, painting, repairing, construction maintenance, renovation, removal, or wrecking of any fixed structure or part of a fixed structure.

California Environmental Quality Act

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value and are afforded protection under state laws and regulations, notably, the California Environmental Quality Act (CEQA; California Public Resources Code Section 21000 et seq.). This section satisfies project requirements in accordance with CEQA and California Public Resources Code Section 5097.5. This analysis also complies with guidelines and significance criteria specified by the Society of Vertebrate Paleontology (SVP 2010).

Paleontological resources are explicitly afforded protection by CEQA, specifically in Section VII(f) of CEQA Guidelines Appendix G, Environmental Checklist Form, which addresses the potential for adverse impacts to “unique paleontological resource[s] or site[s] or unique geological feature[s]” (14 CCR 15000 et seq.). This provision covers fossils of signal importance—remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group—as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth. Further, CEQA provides that, generally, a resource shall be considered “historically significant” if it has yielded or may be likely to yield information important in prehistory (14 CCR 15064.5[a][3][D]). Paleontological resources would fall within this category.

Local

March Joint Powers Authority General Plan

Resource Management Element

The March JPA General Plan Resource Management Element outlines conservation programs associated with resource utilization, preservation techniques, and the regulation of activities that affect or preclude the utilization of resources, including open space (March JPA 1999). Within the March JPA planning area, open space includes rock outcropping hillside areas that limit development. The Resource Management Element complies with regulations in Section 65302(d) and 65302(e) of the California Government Code and the State Mining and Reclamation Act (California Public Resources Code Section 2710 et seq.). According to these requirements, the Resource Management Element must contain goals and policies that further the protection and maintenance of the state's natural resources, including water, soils, and minerals, and prevent wasteful exploitation, degradation, and destruction of those resources. The Resource Management Element identifies local resources within the March JPA planning area and establishes a plan for conservation, management, or preservation of those resources (March JPA 1999).

The following goal and policies address the geologic resources within the March JPA planning area that can become strained as development creates a greater demand on significant natural features (March JPA 1999):

Goal 3: Conserve and protect significant land forms, important watershed areas, mineral resources, and soil conditions.

Policy 3.5: Require and practice proper soil management techniques to reduce erosion, sedimentation and other soil-related problems.

Policy 3.6: Control erosion during and following construction through proper grading techniques, vegetation replanting, and the installation of proper drainage control improvements.

Policy 3.7: Require erosion control measures such as binders, revegetation, slope covers, and other practices which reduce soil erosion due to wind and water.

Safety/Risk Management Element

The Safety/Risk Management Element of the March JPA General Plan presents a planning area-wide approach for preventing the creation of hazards in the planning area and for minimizing the potential for injury, damage, and disruption brought by natural and human-made catastrophes and emergencies. The Safety/Risk Management Element maps the location of known hazard areas and establishes safety standards and programs to protect life and property. Public safety standards include guidelines for activities involving risk to the public and measures to follow when development occurs in areas susceptible to natural or human-made hazards (March JPA 1999).

The following goal and policies address the prevention of seismic and geologic hazards within the March JPA planning area (March JPA 1999):

Goal 1: Minimize injury and loss of life, property damage, and other impacts caused by seismic shaking, fault rupture, ground failure, and landslides.

Policy 1.1: Require geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and development review process. Require mitigation of seismic or geologic hazards to the satisfaction of the responsible agencies.

Policy 1.2: Ensure all grading plans comply with the Uniform Building Code (UBC) and California Building Code including, if necessary, requiring preliminary investigations of development sites by a State-registered geotechnical engineers and certified engineering geologists.

Policy 1.3: If necessary, require liquefaction assessment in studies in any area identified as having moderate to high liquefaction susceptibility.

3.6.3 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's impacts related to geology and soils are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and, where appropriate, the March JPA CEQA Guidelines (March JPA 2022). According to these CEQA Guidelines, a project would result in significant impacts if it would:

- a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.
 - ii. Strong seismic ground shaking.
 - iii. Seismic-related ground failure, including liquefaction.
 - iv. Landslides.
- b. Result in substantial soil erosion or the loss of topsoil.
- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
- e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
- f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Through the analysis provided in the Initial Study prepared for the Proposed Project (refer to Appendix A-2), it was determined that the Proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death related to fault surface rupturing or landslides. In addition, the Initial Study concluded that the Proposed Project would not result in substantial soil erosion or loss of topsoil, or 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. Accordingly, these issues are not analyzed in this section of the EIR. For details regarding these thresholds, please refer to Section 4.2, Effects Found Not to Be Significant, and the Initial Study (Appendix A-2).

For the purposes of the analysis in this EIR, a significant impact would occur if the Proposed Project would:

- GEO-1** Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and/or seismic-related ground failure, including liquefaction.
- GEO-2** 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.
- GEO-3** Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
- GEO-4** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

3.6.4 Impacts Analysis

Threshold GEO-1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and/or seismic-related ground failure, including liquefaction?

Less-Than-Significant Impact. The project site is located between two major fault zones: the Elsinore Fault Zone, approximately 14 miles to the southwest, and the San Jacinto Fault Zone, approximately 7 miles to the northeast (CGS 2021). Along with the San Andreas Fault, these faults are the primary seismic sources in the area. Similar to most of Southern California, strong ground shaking can be expected at the project site during moderate to severe earthquakes. Intensity of ground shaking at a given location depends primarily on earthquake magnitude, site distance from the source, and site response (i.e., soil type) characteristics. Based on Riverside County geologic hazards maps, the project site is not located in a zone of high liquefaction potential. In addition, based on the Geotechnical Exploration, liquefaction-induced settlement and dynamic dry settlement-induced ground settlement are not expected to be significant hazards at the site due to the absence of near-surface saturated sand layers and underlying dense older alluvium and granitic bedrock (Appendix H).

The Proposed Project would include construction of an approximately 180,800-square-foot cargo building, which would include office space. The Proposed Project would also include reconstruction and widening of new aircraft taxiways and aircraft parking aprons, and construction of a vehicle access/service road. In addition, underground storm drains would be replaced and approximately 91,300 cubic feet of underground detention basins would be constructed to provide storage for required stormwater runoff treatment prior to discharge to the backbone storm drain system. As with all development within Riverside County, the proposed aboveground and belowground structures and utilities would be designed to current CBC seismic design standards. In addition, the Proposed Project would be designed to be consistent with the March JPA Development Code and the CBC to anticipate the effects associated with direct or indirect effects of potential seismic ground shaking and seismic-related ground failure, including liquefaction. As part of its plan check process, the March JPA reviews project plans to ensure compliance with the existing and regularly amended seismic design provisions of the CBC and the March JPA Development Code. The March JPA's building plan check process would review the Proposed Project with consideration of the following (March JPA 1999):

- Symmetrical, concrete, and steel-framed buildings are particularly earthquake resistant forms of non-residential construction and shall be encouraged.

- Irregularly shaped buildings are more difficult to design to withstand strong ground motions, and are therefore more susceptible to damage during an earthquake. Irregularly shaped buildings shall be discouraged.
- Buildings with adverse discontinuities in strength between major structural elements are susceptible to earthquake damage and shall be discouraged.
- Nonstructural elements must not block exit routes and constrain rescue operations if damaged or overturned during a tremor.
- Non-residential, precast tilt-up construction must have adequate diaphragms (horizontal bracing system that transmits horizontal forces to vertical resisting components) and adequate tie-ins or connections between structural components to prevent roof collapse.
- Stairways and elevators shall be adequately strengthened, and nonstructural components such as emergency generators, computers, and cabinets shall be anchored.

Designated building inspectors from the March JPA would review project plans to ensure compliance with the existing and regularly amended seismic design provisions of the CBC to reduce potential impacts from seismic ground shaking, including liquefaction.

Prior to issuance of a grading permit, the project applicant would submit evidence to the satisfaction of the March JPA that all future grading and construction on the project site would comply with the geotechnical recommendations contained in the Geotechnical Exploration (Appendix H). These recommendations include provisions for earthwork, foundation design, vapor retarder, retaining walls, corrosivity evaluation, preliminary pavement design for vehicular parking driveway design, and the preliminary pavement design for air traffic and taxiways. Prior to the issuance of building permits, the March JPA-designated plan reviewer would ensure that design recommendations are incorporated into the project designs. Construction approval letters from the March JPA Planning Director constitute evidence that all grading and construction on the project site complies with the applicable geotechnical recommendations.

In addition, Proposed Project construction and operation would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and/or seismic-related ground failure, including liquefaction. CEQA case law has addressed the scope of analysis required in EIRs for potential impacts resulting from existing environmental hazards, such as geological hazards in the vicinity of a site for a proposed project. In *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 377, the California Supreme Court held that “agencies subject to CEQA generally are *not* required to analyze the impact of existing environmental conditions on a project’s future users or residents” (italics added). For this reason, the court found the following former language from CEQA Guidelines Section 15126.2(a) to be invalid: “An EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there” (*California Building Industry Association v. Bay Area Air Quality Management District* [2015] 62 Cal.4th at 390).

The court did not hold, however, that CEQA never requires consideration of the effects of existing environmental conditions on the future occupants or users of a proposed project. However, the circumstances in which such conditions may be considered are narrow: “when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the

project's impact on the environment—and not the environment's impact on the project—that compels an evaluation of how future residents or users could be affected by exacerbated conditions” (*California Building Industry Association v. Bay Area Air Quality Management District* [2015] 62 Cal.4th at 377378; italics added). Because this exception to the general rule would presumably never apply to existing seismic hazards, the court concluded that this particular topic was outside the ambit of CEQA (*California Building Industry Association v. Bay Area Air Quality Management District* [2015] 62 Cal.4th at 390). For the foregoing reasons, and because the Proposed Project would not cause strong seismic ground shaking or exacerbate the potential for strong seismic ground shaking and/or seismic-related ground failure, including liquefaction, impacts would be **less than significant**, and no mitigation is required.

Threshold GEO-2: Would the project 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. Based on the relatively flat to gently sloping topography of the project site, and as indicated by the County of Riverside General Plan Safety Element, the project site is not located within an area that is subject to slope instability (County of Riverside 2021, Figure 3, Landslide Risk). As such, the potential for on-site landslides is considered to be low to non-existent. As discussed in the response to Threshold GEO-1, it is a project's impact on the environment—and not the environment's impact on a project—that compels an evaluation of how future users could be affected by exacerbated conditions. In the event that excavations were completed into an existing landslide, such excavations could reactivate the landslide. Because the potential for on-site landslides is considered to be low to non-existent, the Proposed Project would not cause or exacerbate the potential for reactivation of an existing landslide. Similarly, in the event unsafe (i.e., prone to failure) temporary or permanent slopes were constructed as part of grading and construction, slope instability and failure could occur. However, temporary and permanent slopes would be constructed in accordance with the recommendations of the project-specific Geotechnical Exploration, as required by the 2022 CBC, as well as in compliance with provisions of CBC Sections 1804 and 1804A regarding excavation, grading, and fill, thus eliminating the potential for slope failure to occur.

Based on the Geotechnical Exploration prepared for the Proposed Project (Appendix H) and the County of Riverside General Plan Safety Element, liquefaction, liquefaction-induced lateral spreading, and dynamic dry settlement are not expected to be significant hazards at the site due to the absence of near-surface saturated sand layers and underlying dense older alluvium and granitic bedrock. The analysis performed for the Geotechnical Exploration showed that potential dynamic settlement/lateral spreading due to ground shaking was estimated to be less than 1 inch. This settlement/spreading would be expected to occur over a large area. As such, seismic settlement is not expected to exceed 0.5 inches in a 40-foot horizontal distance from the proposed building, which is not considered a significant hazard (Appendix H).

In addition, the Proposed Project would be designed and constructed in accordance with the CBC, the March JPA Development Code, and recommendations of the project-specific geotechnical recommendations (Appendix H). These recommendations include over-excavation of incompetent materials, compaction of soils, and design specifications designed to resist changes in loads and pressure. To reduce potential impacts from ground failure, March JPA designated building inspectors would review project plans to ensure compliance with the existing and regularly amended provisions of the CBC.

Regarding the potential for the Proposed Project to experience subsidence, according to the USGS Survey Areas of Land Subsidence in California map, there have been no recorded instances of subsidence in the project site (USGS 2020). Similarly, construction and operation of the Proposed Project would not create conditions that would cause ground subsidence to occur. As a result, impacts associated with subsidence would be less than significant, and no mitigation is required.

Near-surface soils on the project site consist of younger alluvium and older alluvium, generally consisting of medium-dense to dense silty to clayey sand. As discussed above, laboratory testing conducted as part of the Geotechnical Exploration performed for the Proposed Project indicated that the on-site soils/alluvium in the eastern portion of the site are expected to possess a slight to moderate collapse potential (Appendix H). Based on laboratory test results, projected soil collapse-induced settlement was estimated at up to 4 inches within the project site (Appendix H). However, the Proposed Project would be designed and constructed in accordance with the CBC, March JPA Development Code, and recommendations of the project-specific Geotechnical Exploration (Appendix H). These recommendations include over-excavation of incompetent materials, compaction of soils, and design specifications designed to resist changes in loads and pressure. As a result, impacts associated with soil collapse and soil settlement would be less than significant, and no mitigation is required.

In summary, all impacts associated with location of the project site on a geologic unit or soil that is unstable, or that would become unstable as a result of the Proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, would be **less than significant**, and no mitigation is required.

Threshold GEO-3: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less-Than-Significant Impact. Soil test results indicate that on-site soils generally possess a very low expansion potential ($EI < 21$). Based on the presence of silty to clayey sand, low expansive soils ($EI < 51$) may also be encountered during grading and construction. However, the Proposed Project would be designed and constructed in accordance with the CBC, March JPA Development Code, and recommendations of the project-specific Geotechnical Exploration (Appendix H). These recommendations include providing a minimum of 3 feet of separation between expansive clay layers and finished grades, which would avoid contact between structural footings and expansive soils. In addition, Proposed Project construction and operation would not cause or exacerbate the potential for soil expansion to occur. Therefore, soil expansion-related impacts would be **less than significant**, and no mitigation is required.

Threshold GEO-4: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less-Than-Significant Impact with Mitigation Incorporated. The geologic and soil maps of the project site and vicinity indicate that the APE is in an area of exposed Pleistocene-age soils and sediment developed from the decomposition of upthrown granitic rock. These early Pleistocene-age sediments have a high potential to contain paleontological resources. Although much of the ground surface of the APE has been disturbed, the level of disturbance varies greatly at different locations. Portions of the APE are covered with paved taxiways and aprons, and other portions appear to have been left largely unused after the initial leveling and grading in the early 1940s (Appendices E and I). Therefore, any ground-disturbing activities that occur as

part of the Proposed Project have the potential to disturb previously unknown or undiscovered paleontological resources, resulting in potentially significant impacts. However, with implementation of **Mitigation Measure (MM) GEO-1** (Paleontological Monitoring Program; see Section 3.6.5), which requires monitoring for and recovery of any found paleontological resources, impacts to paleontological resources would be **less than significant with mitigation incorporated**.

3.6.5 Mitigation Measures

The following recommended mitigation measure would reduce adverse impacts on paleontological resources from the Proposed Project:

MM-GEO-1 Paleontological Monitoring Program. Prior to the issuance of a grading permit, the project applicant shall, to the satisfaction of the March Joint Powers Authority, submit a paleontological monitoring program drafted by a qualified paleontologist (Paleontologist) in accordance with Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, along with evidence that a paleontological monitor has been retained to monitor mass grading and construction activities and has the authority to temporarily halt or divert construction equipment to allow for removal of abundant or large specimens. As part of the paleontological monitoring program, the project applicant shall implement the following actions:

- A paleontological monitor shall be on site during all excavations below the depth of previously disturbed sediments. Specifically, all earthmoving operations above the depth of 3 feet below ground surface (bgs) shall be monitored periodically to identify the sediments being impacted, and any earthmoving operations reaching beyond the depth of 3 feet bgs shall require continuous monitoring for potential paleontological remains.
- In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor shall temporarily halt and/or divert grading activities to allow evaluation and potential recovery of paleontological resources by the Paleontologist. The area of discovery plus a 50-foot-radius buffer shall be roped off. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find.
- Recovered specimens shall be identified to the lowest taxonomic level and curated at a repository with permanent retrievable storage that allows for further research in the future, such as the Western Science Center.
- If, during the paleontological monitoring program, half the Proposed Project excavations have occurred with no fossil recovery, monitoring can be reduced or terminated, as determined by the Paleontologist.
- A report of findings, including an itemized inventory of recovered specimens and a discussion of their significance when appropriate, shall be prepared upon completion of the research procedures outlined above. The report shall summarize the monitoring program and include geological observations and any paleontological resources recovered during paleontological monitoring for the Proposed Project. Approval of the report and the inventory by the March Joint Powers Authority shall signify completion of the mitigation program.

3.6.6 Level of Significance after Mitigation

With implementation of **MM-GEO-1**, which requires monitoring for and recovery of any found paleontological resources, potentially significant paleontological impacts would be reduced to **less-than-significant** levels. All other impacts relating to geology and soils would be **less than significant** without requiring mitigation.

3.6.7 Cumulative Effects

The geographic extent for this cumulative impact analysis includes the March JPA planning area and surrounding jurisdictions, including March ARB, the City of Riverside, City of Moreno Valley, and County of Riverside (refer to Figure 3-1, Cumulative Projects Map, and Table 3-1, Cumulative Projects, in the introduction to Chapter 3, Environmental Analysis). As development occurs within the cumulative area, potential cumulative impacts on geology and soils (including paleontological resources) would result from projects that combine to create geologic hazards, including unstable geologic conditions. However, most geology and soil hazards associated with development, including liquefaction, landslides, and unstable soils, would be site specific and can be mitigated on a project-by-project basis. Each cumulative project would be required to adhere to building engineering design standards per the most recent version of the CBC to ensure the safety of building occupants and avoid a cumulative geologic hazard. Additionally, as needed, projects would incorporate individual mitigation or geotechnical requirements for site-specific geologic hazards or paleontological resources present on each individual cumulative project site. As a result, potential cumulative impacts related to site-specific geologic hazards, such as seismically induced ground failure, expansive soils, and soil collapse, as well as paleontological resources, would not occur. Therefore, the Proposed Project, in combination with other cumulative projects, would not contribute to a significant cumulative impact associated with geology and soils. As such, cumulative impacts would be **less than significant**.

3.6.8 References Cited

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USGS (U.S. Geological Survey). 2020. "Areas of Land Subsidence in California." Accessed January 12, 2023. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html.



SOURCE: CRM Tech 2020

FIGURE 3.6-1

Area of Potential Effects for Paleontological Resources

Meridian D-1 Gateway Aviation Center Project

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3.7 Greenhouse Gas Emissions

This section describes the existing greenhouse gas (GHG) conditions of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, evaluates potential impacts related to implementation of the Proposed Project, and identifies mitigation measures. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Meridian D-1 Gateway Aviation Center Air Quality Impact Analysis (Air Quality Report) prepared by Urban Crossroads in April 2024 (Appendix B-1)
- Meridian D-1 Gateway Aviation Center Opening Year Emissions Comparison Memorandum (Opening Year Emissions Memo), prepared by Urban Crossroads in April 2023 (Appendix B-2)
- Meridian D-1 Gateway Aviation Center Greenhouse Gas Analysis (GHG Analysis) prepared by Urban Crossroads in April 2024 (Appendix G)
- Gateway Aviation Traffic Analysis: March Joint Powers Authority (JPA) (Traffic Analysis) prepared by Urban Crossroads in July 2023 (Appendix M-1)

This analysis is based on emissions calculations, the Federal Aviation Administration (FAA) Aviation Environmental Design Tool (AEDT), and the California Emission Estimator Model (CalEEMod) outputs presented in the Proposed Project's GHG Analysis (Appendix G). Other sources consulted are listed in Section 3.7.8, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port (MIP) Airport under the jurisdiction of March JPA. The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March ARB. Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the holiday season (i.e., late November through late December), increased aircraft operations would be anticipated (estimated to result in an additional 128 two-way flights [256 flight operations] over a 4-week period); however, the maximum annual aircraft operations would not exceed the currently available civilian air cargo operations capacity under the Joint Use Agreement.¹ Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.7.1 Existing Conditions

Global Climate Change

Global climate change is defined as the change in average meteorological conditions on Earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that global climate change is the result of increased concentrations of GHGs in the Earth's atmosphere, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. The majority of scientists believe

¹ The current capacity of annual civilian air cargo operations is approximately 21,000 flight operations.

that this increased rate of climate change is the result of GHGs from human activity and industrialization over the past 200 years (Appendix G).

Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor (H₂O), CO₂, N₂O, CH₄, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These gases are important due to their residence time (the duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the Earth's atmosphere, but prevent radioactive heat from escaping, thus warming the Earth's atmosphere. Global climate change can occur naturally, as it has in the past with the previous ice ages (Appendix G).

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic (human-caused) activities. Without the natural GHG effect, the Earth's average temperature would be approximately 61°F cooler than it is currently. The accumulation of these gases in the Earth's atmosphere is considered to be the cause for the observed increase in the Earth's temperature (Appendix G).

Global Warming Potential

GHGs have varying global warming potential (GWP) values. The GWP of a GHG indicates the amount of warming that a gas causes over a given period of time, and represents the potential of a gas to trap heat in the atmosphere. CO₂ is used as the reference gas for GWP, and thus has a GWP of 1. *Carbon dioxide equivalent* (CO₂e) is a term used for describing the different GHGs using a common unit. CO₂e signifies the amount of CO₂ that would have the equivalent GWP to a given GHG.

The atmospheric lifetime and GWP of selected GHGs are summarized in Table 3.7-1. As shown in the table, GWP from the Second Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) ranges from 1 for CO₂ to 23,900 for SF₆ (IPCC 2007), and GWP from the Fifth Assessment Report ranges from 1 for CO₂ to 23,500 for SF₆ (IPCC 2016).

Table 3.7-1. Global Warming Potential and Atmospheric Lifetime of Select GHGs

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-Year Time Horizon)		
		Second Assessment Report	Fourth Assessment Report	Fifth Assessment Report
CO ₂	N/A ^a	1	1	1
CH ₄	12.4	21	25	28
N ₂ O	121	310	298	265
HFC-23	222	11,700	14,800	12,400
HFC-134a	13.4	1,300	1,430	1,300
HFC-152a	1.5	140	124	138
SF ₆	3,200	23,900	22,800	23,500

Source: IPCC n.d.

Notes: CO₂ = carbon dioxide; N/A = not applicable; CH₄ = methane; N₂O = nitrous oxide; HFC = hydrofluorocarbon; HFC-23 = fluoroform (CHF₃); HFC-134a = CH₂FCF₃ (1,1,1,2-tetrafluoroethane); HFC-152a = difluoroethane (CH₃CHF₂); SF₆ = sulfur hexafluoride.

^a As per Appendix 8.A of IPCC's Fifth Assessment Report (2016), no single lifetime can be given.

Greenhouse Gas Emissions Inventories

Global

IPCC tracks worldwide anthropogenic GHG emissions for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2018. The sum of these emissions totaled approximately 28,768,439 gigagrams of CO_{2e},² as summarized in Table 3.7-2 (United Nations 2019a, 2019b).

United States

As noted in Table 3.7-2, which presents the top GHG-producing countries and the European Union, the United States, as a single country, was the number 2 producer of GHG emissions in 2018.

Table 3.7-2. Top GHG Producing Countries and the European Union

Emitting Countries	Greenhouse Gas Emissions (Gg CO _{2e})
China	12,300,200
United States	6,676,650
European Union (28 member countries)	4,232,274
India	2,220,123
Russian Federation	2,100,850
Japan	1,238,343
Total	28,768,439

Source: United Nations 2019a.

Notes: Gg = gigagram; CO_{2e} = carbon dioxide equivalent.

State of California

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the U.S. emissions inventory total (World Resources Institute 2023). The California Air Resources Board (CARB) compiles GHG inventories for the State of California. Based on the 2022 GHG inventory data (i.e., the latest year for which data are available) for the 2000–2020 GHG emissions period, California emitted an average 369.2 million metric tons (MMT) of carbon dioxide equivalent (CO_{2e}) per year (CO_{2e}/yr), or 369,200 gigagrams of CO_{2e} (5.55% of the total United States GHG emissions) (CARB 2022a).

Table 3.7-3 presents the most recent annual GHG emissions for the State of California and the County of Riverside.

² The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change, and Forestry (LULUCF). For countries without 2018 data, the Framework Convention data for the most recent year were used (Framework Convention, “Annex I Parties – GHG total without LULUCF”). The most recent GHG emissions for China and India are from 2014 and 2010, respectively.

Table 3.7-3. California and Riverside County Annual GHG Emissions

Source	GHG Emissions (Gg CO _{2e})
California	369,200
Riverside County	4,906

Sources: CARB 2022a; County of Riverside 2019.

Notes: GHG = greenhouse gas; Gg = gigagram; CO_{2e} = carbon dioxide equivalent.

CARB 2022a data were used for California emissions and County of Riverside 2019 CAP data (2017 inventory year) were used for Riverside County.

County of Riverside

The County of Riverside's 2019 Climate Action Plan Update (CAP) prepared a County-wide GHG inventory for the year 2017 and identified the GHG inventory total at 4,905,518 MT CO_{2e}. Transportation (on-road) emissions represented 1,766,784 MT CO_{2e}, approximately 36% of the total inventory, and aviation represented 26,786 MT CO_{2e}, approximately 0.55% (Appendix G).

Effects of Climate Change in California

Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by the year 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat (Appendix G).

Water Resources

A vast network of artificial reservoirs and aqueducts captures and transports water throughout the state from Northern California rivers and the Colorado River. The current distribution system relies on the Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages (Appendix G).

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70% to 90%. Under the lower warming range scenario, snowpack losses could be only half as much as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends, in part, on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. Winter tourism could be adversely affected, and under the lower warming range, the ski season at lower elevations could be reduced by

as much as 1 month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other winter activities (Appendix G).

The state's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major freshwater supply (Appendix G).

Agriculture

Increased temperatures could cause widespread changes to the agriculture industry, reducing the quantity and quality of agricultural products statewide. California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO₂ levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth (Appendix G).

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts (Appendix G).

In addition, continued global climate change could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species, while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued global climate change could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates (Appendix G).

Forests and Landscapes

Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, because wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. In contrast, wildfires in Northern California could increase by up to 90% due to decreased precipitation (Appendix G).

Moreover, continued global climate change has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60% to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of global climate change (Appendix G).

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12 to 14 inches (Appendix G).

3.7.2 Relevant Plans, Policies, and Ordinances

International

Climate change is a global issue involving GHG emissions from all around the world; therefore, international organizations and countries such as the ones discussed below have joined together in an effort to reduce GHGs.

Intergovernmental Panel on Climate Change

In 1988, the United Nations and the World Meteorological Organization established IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations Framework Convention on Climate Change (Framework Convention)

On March 21, 1994, the United States joined countries around the world in signing the Framework Convention. Under the Framework Convention, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

International Climate Change Treaties

The Kyoto Protocol is an international agreement linked to the Framework Convention. The major feature of the Kyoto Protocol is that it set binding targets for 37 industrialized countries and the European Community for reducing GHG emissions at an average of 5% against 1990 levels over a 5-year period (2008–2012). The Framework Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, ratifying the Kyoto Protocol commits them to doing so. Developed countries have contributed more emissions compared to non-developed countries over the last 150 years; therefore, the Kyoto Protocol places a heavier burden on developed nations under the principle of “common but differentiated responsibilities.”

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the United Nations Climate Change Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2°C (3.6°F) above pre-industrial levels, subject to a review in 2015. The United Nations Climate Change Committee held additional meetings in Durban, South Africa, in November 2011; Doha, Qatar, in November 2012; and Warsaw, Poland, in November 2013.

On September 23, 2014, more than 100 heads of state and government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the United Nations. At the Climate Summit, heads of government, business, and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the Framework Convention reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decades-old global climate effort. Culminating a 4-year negotiating round, the new treaty (known as the Paris Agreement; The White House 2021) ended the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and that they undergo international review.

The Paris Agreement and a companion decision by the parties, known as the 21st Session of the United Nations Framework Convention on Climate Change Conference of the Parties (Conference of the Parties), were the key outcomes of the conference. Together, the Paris Agreement and the accompanying Conference of the Parties decision did the following (C2ES 2015):

- Reaffirmed the goal of limiting global temperature increase well below 2°C while urging efforts to limit the increase to 1.5°C (2.7°F).
- Established binding commitments by all parties to make “nationally determined contributions” (NDCs) and to pursue domestic measures aimed at achieving them.
- Committed all countries to report regularly on their emissions and “progress made in implementing and achieving” their NDCs and to undergo international review.
- Committed all countries to submit new NDCs every 5 years, with the clear expectation that they will “represent a progression” beyond previous ones.
- Reaffirmed the binding obligations of developed countries under the Framework Convention to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries.
- Extended the current goal of mobilizing \$100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025.
- Extended a mechanism to address “loss and damage” resulting from climate change, which explicitly will not “involve or provide a basis for any liability or compensation.”
- Required parties engaging in international emissions trading to avoid “double counting.”
- Called for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country’s NDC.

Following President Biden’s day one executive order, the United States officially rejoined the landmark Paris Agreement on February 19, 2021, positioning the country to once again be part of the global climate solution. Meanwhile, city, state, business, and civic leaders across the country and around the world have been ramping up efforts to drive the clean energy advances needed to meet the goals of the agreement and put the brakes on dangerous climate change (Appendix G).

Federal

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG Endangerment

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the U.S. Supreme Court found that four GHGs, including CO₂, are air pollutants subject to regulation under Section 202(a)(1) of the federal Clean Air Act (CAA). The Supreme Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section “Clean Vehicles,” below. After a lengthy legal challenge, the U.S. Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator’s findings (EPA 2009).

Clean Vehicles

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light-duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, EPA and the U.S. Department of Transportation’s National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applied to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They required these vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile, equivalent to 35.5 mpg if the automobile industry were to meet this CO₂ level solely through fuel economy improvements. Together, these standards aimed to cut CO₂ emissions by an estimated 960 MMT and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). EPA and NHTSA issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012. The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams per mile of CO₂ by model year 2025, which is equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements.

EPA and NHTSA issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies proposed engine and vehicle standards that began in the 2014 model year and aimed to achieve up to a 20% reduction in CO₂ emissions and fuel consumption by the 2018 model year. For heavy-duty trucks and vans, the agencies proposed separate gasoline and diesel-truck standards, which phased in starting in the 2014 model year and achieved up to a 10% reduction for gasoline vehicles and a 15% reduction for diesel vehicles by the 2018 model year (12% and 17%, respectively, if accounting for air-conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards achieved up to a 10% reduction in fuel consumption and CO₂ emissions from the 2014 to 2018 model years.

On April 2, 2018, EPA signed the Mid-Term Evaluation Final Determination, which finds that the model years 2022 to 2025 GHG standards are not appropriate and should be revised (88 FR 16077). This Final Determination serves to initiate a notice to further consider appropriate standards for model years 2022 to 2025 light-duty vehicles. On August 24, 2018, EPA and NHTSA published a proposal to freeze the model year 2020 standards through model year 2026 and to revoke California's waiver under the CAA to establish more stringent standards (EPA and NHTSA 2018). As of March 31, 2020, NHTSA and EPA finalized the SAFE Vehicle Rule, which increased the stringency of Corporate Average Fuel Economy and CO₂ emissions standards by 1.5% each year through model year 2026 (NHTSA 2020).

On March 31, 2022, NHTSA finalized Corporate Average Fuel Economy standards for model years 2024–2026. The standards for passenger cars and light trucks for model years 2024–2025 were increased at a rate of 8% per year and then increased at a rate of 10% per year for model year 2026 vehicles. NHTSA currently projects that the revised standards would require an industry-fleet-wide average of roughly 49 mpg in model year 2026 and would reduce average fuel outlays over the lifetimes of affected vehicles that provide consumers hundreds of dollars in net savings. These standards are directly responsive to the agency's statutory mandate to improve energy conservation and reduce the nation's energy dependence on foreign sources (NHTSA 2022).

Mandatory Reporting of GHGs

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons (MT) per year or more of GHG emissions are required to submit annual reports to EPA.

New Source Review

EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule tailors the requirements of these CAA permitting programs to limit which facilities are required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Code of Federal Regulations, EPA states the following:

This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the

functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016.

EPA estimates that facilities responsible for nearly 70% of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters: power plants, refineries, and cement production facilities.

Standards of Performance for GHG Emissions for New Stationary Sources: Electric Utility Generating Units

As required by a settlement agreement, EPA proposed new performance standards for emissions of CO₂ for new, affected, fossil-fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts would be required to meet an output-based standard of 1,000 pounds of CO₂ per megawatt-hour, based on the performance of widely used natural gas combined-cycle technology. On February 9, 2016, the U.S. Supreme Court issued a stay of this regulation pending litigation. Additionally, the EPA Administrator signed a measure to repeal the Clean Power Plan, including the CO₂ standards. The Clean Power Plan was officially repealed on June 19, 2019, when EPA issued the final Affordable Clean Energy (ACE) rule. Under the ACE rule, new state emission guidelines were established that provided existing coal-fired electric utility generating units with achievable standards. On January 19, 2021, the DC Circuit Court of Appeals ruled that EPA's ACE Rule for GHG emissions from power plants rested on an erroneous interpretation of the CAA that barred EPA from considering measures beyond those that apply at and to an individual source. The court therefore vacated and remanded the ACE Rule and adopted a replacement rule which regulates CO₂ emissions from existing power plants, potentially again considering generation shifting and other measures to more aggressively target power sector emissions.

Cap-and-Trade

Cap-and-trade refers to a policy tool in which emissions are limited to a certain amount and can be traded or can otherwise provide flexibility on how the emitter can comply. Successful examples in the United States include the Acid Rain Program, the N₂O Budget Trading Program, and the Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade, as noted in the following paragraphs.

Regional GHG Initiative

The Regional GHG Initiative is an effort to reduce GHG emissions among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO₂ emissions from power plants, auctions CO₂ emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Regional GHG Initiative began in 2008.

Western Climate Initiative

The Western Climate Initiative partner jurisdictions developed a comprehensive initiative to reduce regional GHG emissions to 15% below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system on January 1, 2014, and joint offset auctions took place in 2015. Although the Western Climate Initiative has yet to publish whether it has successfully reached the 2020 emissions goal initiative set in 2007, Senate Bill (SB) 32 requires that California, a major partner in the Western Climate Initiative, adopt the goal of reducing statewide GHG emissions to 40% below the 1990 level by 2030.

SmartWay Program

The SmartWay Program is a public/private initiative between EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of GHG emissions and air pollution) of the goods movement supply chains. SmartWay consists of four components (EPA 2019):

1. **SmartWay Transport Partnership:** A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
2. **SmartWay Technology Program:** A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
3. **SmartWay Vehicles:** A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
4. **SmartWay International Interests:** Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay refers to requirements geared toward reducing fuel consumption. Most large trucking fleets with newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all heavy-duty trucks will have to comply with CARB's Tractor-Trailer GHG Regulation that is designed with the SmartWay Program in mind to reduce GHG emissions by making them more fuel efficient. For instance, in 2015, 53-foot or longer dry vans or refrigerated trailers equipped with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices obtained 10% or more fuel savings over traditional trailers.

Through the SmartWay Program, EPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions and fuel economy testing, demonstration projects, and technical literature review. As a result, EPA determined that the following types of technologies provide fuel saving and/or emissions-reducing benefits when used properly in their designed applications, and has verified certain products (EPA 2019):

- Idle reduction technologies to provide for less idling of the engine when it is not needed reduces fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low-rolling-resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel will eventually slow down because of this resistance.

- Retrofit technologies include things such as diesel particulate filters and emissions upgrades (to a higher tier), which reduce emissions.
- Federal excise tax exemptions incentivize investments in the above technologies leading to emission and fuel reductions.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act was signed into law on December 19, 2007, by President George W. Bush. The Energy Independence and Security Act updates the 1992 Energy Policy Act, which covered low-voltage, general-purpose, three-phase electric motors from 1 to 200 horsepower (hp). The Energy Independence and Security Act aims to reduce GHG emissions through the following actions:

- Expanding the Renewable Fuel Standard so that nearly 20% of transportation fuel sold in the United States by 2022 will be from biofuels (36 billion gallons)
- Increasing the efficiency of products, buildings, and vehicles
- Promoting research on and deploying GHG capture and storage options
- Requiring 27% greater efficiency by 2014 for common household light bulbs and 60%–70% more efficient by 2022
- Improving vehicle fuel economy

GHG Emissions Standards and Test Procedures for Airplanes and Airplane Engines

EPA finalized GHG emission standards that apply to certain new commercial airplanes, including all passenger jets. These standards match the international airplane CO₂ standards adopted by the International Civil Aviation Organization in 2017. The rulemaking implements EPA's authority under the CAA and maintains the worldwide acceptance of U.S. manufactured airplanes and airplane engines. These standards will ensure control of GHG emissions, maintain international uniformity of airplane standards, and allow U.S. manufacturers of covered airplanes to remain competitive in the global marketplace.

Inflation Reduction Act of 2022

The Inflation Reduction Act was signed into law by President Biden in August 2022. The bill includes specific investment in energy and climate reform and is projected to reduce GHG emissions within the U.S. by 40% compared to 2005 levels by 2030. The bill allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of electric vehicles (EVs), and includes measures that will make homes more energy efficient.

Multistate

Western Regional Climate Action Initiative

The Western Regional Climate Action Initiative is a partnership among seven U.S. states and four Canadian provinces aimed at developing a regional cap-and-trade economy to reduce GHG emissions. The following comes from the Western Regional Climate Action Initiative's website (WCI 2021):

The WCI [Western Regional Climate Action Initiative] was built on existing greenhouse gas reduction efforts in the individual states as well as two existing regional efforts. In 2003, California, Oregon and Washington created the West Coast Global Warming Initiative, and in 2006, Arizona and New Mexico launched the Southwest Climate Change Initiative.

During 2007 and 2008, the Premiers of British Columbia, Manitoba, Ontario, and Quebec, and the Governors of Montana and Utah joined the original five states in committing to tackle climate change at a regional level. All 11 jurisdictions collaborated in the development of the Design for the WCI Regional Program, which was released in July 2010.

In November 2011, the Western Climate Initiative formed Western Climate Initiative, Inc. (WCI, Inc.), a non-profit corporation that will provide administrative and technical services to support the implementation of state and provincial greenhouse gas emissions trading programs.

British Columbia, California, Ontario, Quebec and Manitoba are continuing to work together through the Western Climate Initiative to develop and harmonize their emissions trading program policies. They are also continuing to work with Western, Midwestern, and Northeast states on a range of other climate and clean energy strategies through the North America 2050 Initiative. North America 2050 is a forum for states, provinces and stakeholders to identify leadership opportunities in climate and clean energy policy.

Pacific Coast Action Plan on Climate and Energy

The governors of California, Oregon, and Washington and the Premier of British Columbia joined together to produce the Pacific Coast Action Plan, signed on October 28, 2013, to reduce GHG emissions, among other goals. The plan organizes their Pacific Coast economies around several initiatives, including the following (CEC 2013):

- Leading national and international policy on climate change
 - Accounting for a price on carbon
 - Harmonizing 2050 targets for GHG emission reductions and developing midterm targets need for long-term reduction goals
 - Affirming the need to inform policy with climate science findings
- Transitioning the West Coast to clean modes of transportation, including 100% zero-emissions vehicles by 2050
 - Continuing deployment of high-speed rail
 - Supporting emerging markets and innovation for alternative fuels in trucks, buses, rail, and ports
- Investing in clean energy and climate-resilient infrastructure, including transforming the energy efficiency market and leading the way to net-zero buildings

State

Legislative Actions to Reduce Greenhouse Gases

The California State Legislature has enacted a series of bills that constitute the most aggressive program to reduce GHG emissions of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB) 32, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 and Title 20 energy standards, were originally adopted for other purposes, such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of California's legislation.

Assembly Bill 32

The California State Legislature enacted AB 32, which required that GHGs emitted in California be reduced to 1990 levels by 2020 (this goal has been met).³ "GHGs," as defined under AB 32, include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride (NF₃), has been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. Pursuant to AB 32, CARB adopted regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 states the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions-reduction goal of Executive Order (EO) B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the California State Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions-reduction measures when updating its Climate Change Scoping Plan (Scoping Plan; CARB 2008).

³ Based on the 2019 GHG inventory data (i.e., the latest year for which data are available) for the 2000–2017 GHG emissions period, California emitted an average 424.1 MMT CO₂e (CARB 2019a). This is less than the 2020 emissions target of 431 MMT CO₂e.

Assembly Bill 1279 – California Climate Crisis Act

The Legislature enacted AB 1279, the California Climate Crisis Act, in September 2022. The bill declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

Senate Bill 375 – Sustainable Communities and Climate Protection Act of 2008

Passing the Senate on August 30, 2008, SB 375 was signed by Governor Schwarzenegger on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits more than 40% of the total GHG emissions in California. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

SB 375 also requires metropolitan planning organizations to prepare a Sustainable Communities Strategy within the Regional Transportation Plan that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses California Environmental Quality Act (CEQA) streamlining as an incentive to encourage residential projects that help achieve AB 32 goals to reduce GHG emissions. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

Concerning CEQA, SB 375, as codified in California Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss growth-inducing impacts, or any project-specific or cumulative impacts from cars or light-duty truck trips generated by a project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved Sustainable Communities Strategy or an alternative planning strategy that the CARB accepts as achieving the GHG emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the mitigation measures required by an applicable prior environmental document.

Assembly Bill 1493

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by EPA’s denial of an implementation waiver. EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.

The standards were phased in during the 2009 through 2016 model years. The near-term (2009–2012) standards were projected to result in an approximately 22% reduction compared with the 2002 fleet, and the mid-term (2013-2016) standards were projected to result in an approximately 30% reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift, as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed

transmissions; and improved air-conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant (Appendix G).

The second phase of implementation for AB 1493 was incorporated into amendments to the Low-Emission Vehicle Program (LEV III), or the Advanced Clean Cars program. The Advanced Clean Cars program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars and deliver increasing numbers of zero-emission technologies, such as full-battery electric cars, newly emerging plug-in hybrid Evs, and hydrogen fuel cell cars. The package will also ensure that adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California. On March 9, 2022, EPA reinstated California's authority under the CAA to implement its own GHG emission standards for cars and light trucks, which other states can also adopt and enforce. With this authority restored, EPA will continue partnering with states to advance the next generation of clean vehicle technologies (Appendix G).

Senate Bill 350 – Clean Energy and Pollution Reduction Act of 2015

In October 2015 the California State Legislature approved, and Governor Brown signed, SB 350, which reaffirmed California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the Renewables Portfolio Standard (RPS), higher energy-efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from SB 350 because of opposition and concern that it would prevent the bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 45% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utilities Commission, the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

Progress in Achieving Assembly Bill 32 Targets and Remaining Reductions Required

The state has made steady progress in implementing AB 32 and achieving targets included in EO S-3-05. The progress is shown in updated emission inventories prepared by CARB for 2000 through 2012 (CARB 2014). The state has achieved the EO S-3-05 target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target.

- 1990: 427 MMT CO₂e (AB 32 2020 target)
- 2000: 463 MMT CO₂e (an average 8% reduction needed to achieve 1990 base)
- 2010: 450 MMT CO₂e (an average 5% reduction needed to achieve 1990 base)

CARB revised the 2020 business-as-usual (BAU) inventory forecast to account for new lower growth projections, which resulted in a new lower reduction from BAU to achieve the 1990 base. The previous reduction from 2020 BAU needed to achieve 1990 levels was 28.4%, and the latest reduction from 2020 BAU is 21.7%.

- 2020: 545 MMT CO₂e BAU (an average 21.7% reduction from BAU needed to achieve 1990 base)

CARB Scoping Plan

CARB's Scoping Plan contains measures designed to reduce the state's emissions to 1990 levels by 2020 to comply with AB 32 (CARB 2008). The Scoping Plan identified recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the 2020 emissions target; each sector has a different emissions-reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target are as follows (CARB 2008):

- Expanding and strengthening existing energy efficiency programs and building and appliance standards.
- Achieving a statewide renewables energy mix of 33%.
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system.
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low-Carbon Fuel Standard (LCFS).
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the state's long-term commitment to AB 32 implementation.

CARB approved the First Scoping Plan Update on May 22, 2014. The First Scoping Plan Update identifies the next steps for California's climate change strategy. The First Scoping Plan Update shows how California planned to meet the near-term 2020 GHG limit, but also sets a path toward long-term, deep GHG emissions reductions. The First Scoping Plan Update establishes a broad framework for continued emissions reductions beyond 2020, on the path to 80% below 1990 levels by 2050. The First Scoping Plan Update identifies progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities for the next several years. The First Scoping Plan Update does not set new targets for the state; instead, it describes a path that would achieve the long-term 2050 goal of EO S-05-03 for emissions to decline to 80% below 1990 levels by 2050 (CARB 2014).

Forecasting the amount of emissions that would occur in 2020 if no actions are taken was necessary to assess the reductions California must achieve to return to the 1990 emissions level by 2020, as required by AB 32. The no-action scenario is known as "business-as-usual," or BAU. CARB originally defined the BAU scenario as emissions in the absence of any GHG emissions-reduction measures discussed in the Scoping Plan.

2017 Climate Change Scoping Plan Update

In compliance with AB 32 and the 2008 Scoping Plan, the target year 2020 has been fulfilled and will look onward to the 2017 Scoping Plan that should comply by 2030.

In November 2017, CARB released the Final 2017 Scoping Plan Update, which identifies the state's post-2020 reduction strategy. The Final 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by EO B-30-15 and codified by SB 32. Key programs that the 2017 Scoping Plan builds upon are the

Cap-and-Trade Program; the LCFS and much cleaner cars, trucks, and freight movement; using cleaner, renewable energy; and strategies to reduce CH₄ emissions from agricultural and other wastes (CARB 2017). The Final 2017 Scoping Plan Update establishes a new emissions limit of 260 MMT CO₂e by 2030, which corresponds to a 40% decrease in 1990 levels by 2030 (CARB 2017).

California's climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero-emission-vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low-carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (CH₄, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities, and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts to tighten emission limits on a broad spectrum of industrial sources. Major elements of the Final 2017 Scoping Plan Update framework are as follows (CARB 2017):

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero-emission-vehicle buses and trucks
- Implementing the LCFS, with an increased stringency (18% by 2030)
- Implementing SB 350, which expands the RPS to 50% and doubles energy efficiency savings by 2030
- California Sustainable Freight Action Plan, which improves freight system efficiency, uses near-zero emissions technology, and uses deployment of zero-emission trucks
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing CH₄ and HFC emissions by 40%, and anthropogenic black carbon emissions by 50% by 2030
- Continued implementation of SB 375
- Post-2020 Cap-and-Trade Program that includes declining caps
- 20% reduction in GHG emissions from refineries by 2030
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink

Note, however, that the 2017 Scoping Plan acknowledges the following (CARB 2017):

Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.

In addition to the statewide strategies listed above, the Final 2017 Scoping Plan Update also identifies local governments as essential partners in achieving the state's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 MT CO₂e or less per capita by 2030, and 2 MT CO₂e or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidence-based bright-line numeric thresholds—consistent with the Scoping Plan and the state's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and

mitigation measures that avoid or minimize project emissions to the degree feasible, or use a performance-based metric using a CAP or other plan to reduce GHG emissions (CARB 2017).

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, is on track to meet the 2020 reduction targets under AB 32 and could achieve the 2030 goals under SB 32 (LBNL 2015a). The research used a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that GHG emissions through 2020 could range from 317 to 415 MT CO_{2e} per year, “indicating that existing state policies will likely allow California to meet its target [of 2020 levels under AB 32]” (LBNL 2015b). CALGAPS also showed that by 2030, emissions could range from 211 to 428 MT CO_{2e} per year, indicating that “even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32]” (LBNL 2015b). CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions would not meet the state’s 80% reduction goal by 2050, various combinations of policies could allow California’s cumulative emissions to remain very low through 2050 (LBNL 2015a).

2022 Climate Change Scoping Plan Update

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan; CARB 2022b, 2022c). The 2022 Scoping Plan builds on the 2017 Scoping Plan as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The 2022 Scoping Plan’s scenario to do this is to “deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor.” The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (CAP) consistent with CEQA Guidelines Section 15183.5 (Appendix G).

The key elements of the 2022 CARB Scoping Plan focus on transportation—the regulations that will impact this sector are adopted and enforced by CARB on vehicle manufacturers and outside the jurisdiction and control of local governments. Under the 2022 Scoping Plan, the state will lead efforts to meet the 2045 carbon neutrality goal through implementation of the following objectives (Appendix G):

- Reimagine roadway projects that increase vehicle miles traveled (VMT) in a way that meets community needs and reduces the need to drive.
- Double local transit capacity and service frequencies by 2030.
- Complete the High-Speed Rail System and other elements of the intercity rail network by 2040.
- Expand and complete planned networks of high-quality active transportation infrastructure.
- Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.
- Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030.
- Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices.

- Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.
- Develop and implement a statewide transportation demand management framework with VMT mitigation requirements for large employers and large developments.
- Prevent uncontrolled growth of autonomous vehicle VMT, particularly zero-passenger miles.
- Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.
- Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems.
- Provide financial support for low-income and disadvantaged Californians' use of transit and new mobility services.
- Expand universal design features for new mobility services.
- Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations.
- Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (RTP/SCS and Regional Housing Needs Allocation) and local plans (e.g., general plans, zoning, and local transportation plans).
- Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.
- Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.
- Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.

Included in the 2022 Scoping Plan is a set of Local Actions (CARB 2022b, Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the state's climate goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section focuses on Residential and Mixed-Use Projects; in fact, CARB states in Appendix D (page 4) that it: "focuses primarily on climate action plans (CAPs) and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting" (Appendix G).

Additionally, CARB states: "The recommendations outlined in this section apply only to residential and mixed-use development project types. California currently faces both a housing crisis and a climate crisis, which necessitates prioritizing recommendations for residential projects to address the housing crisis in a manner that simultaneously supports the State's GHG and regional air quality goals. CARB plans to continue to explore new approaches for other land use types in the future." As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development (Appendix G).

Cap-and-Trade Program

The 2017 Scoping Plan identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a Cap-and-Trade Program will help put California on the path to meeting its goal of achieving a 40% reduction in GHG emissions from 1990 levels by 2030. Under the Cap-and-Trade Program, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap are able to trade permits to emit GHGs within the overall limit (CARB 2017).

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32 (17 CCR 95801–96022). The Cap-and-Trade Program is designed to reduce GHG emissions from regulated entities by more than 16% between 2013 and 2020, and by an additional 40% by 2030. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25,000 MT CO_{2e} per year must comply with the Cap-and-Trade Program. Triggering of the 25,000 MT CO_{2e} per year inclusion threshold is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions.

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or in part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender compliance instruments for each MT CO_{2e} of GHGs they emit (CARB 2019b). There also are requirements to surrender compliance instruments covering 30% of the prior year's compliance obligation by November of each year. For example, in November 2014, a covered entity was required to submit compliance instruments to cover 30% of its 2013 GHG emissions.

The Cap-and-Trade Program provides a firm cap, which provides the highest certainty of achieving the 2030 target. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on a cumulative basis. As summarized by CARB in the First Update of the Climate Change Scoping Plan (CARB 2014):

The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative.

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85% of California's GHG emissions (CARB 2015). The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program.

In December 2017, CARB's Governing Board adopted the 2017 Scoping Plan Update (CARB 2017). To fill the gap in additional reductions needed to achieve the 2030 target, it recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20%.

California Integrated Waste Management Act of 1989 and AB 341

The California Integrated Waste Management Act of 1989, later modified by AB 341, required an implementation schedule from each jurisdiction's source reduction and recycling element, to include the following:

- Diversion of 25% of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities
- Diversion of 50% of all solid waste on and after January 1, 2000
- Source reduction, recycling, and composting of 75% of all sold waste on or after 2020 and annually thereafter

The California Department of Resources Recycling and Recovery (CalRecycle) was required to develop strategies, including source reduction, recycling, and composting activities, to achieve the 2020 goal.

Assembly Bill 1613

AB 1613 directed CEC, the California Public Utilities Commission, and CARB to implement the Waste Heat and Carbon Emissions Reduction Act, which is designed to encourage development of new combined heat and power systems in California with a generating capacity of not more than 20 megawatts. CEC later published modified final guidelines that established the technical criteria for eligibility of combined heat and power systems for programs to be developed by the California Public Utilities Commission and publicly owned utilities. Section 2843 of AB 1613 provides that CEC's guidelines require combined heat and power systems do the following:

- Be designed to reduce waste energy
- Have a minimum efficiency of 60%
- Have NO_x emissions of no more than 0.07 pounds per megawatt-hour
- Be sized to meet the eligible customer generation thermal load
- Operate continuously in a manner that meets the expected thermal load and optimizes the efficient use of waste heat
- Be cost-effective, technologically feasible, and environmentally beneficial

Water Conservation Act of 2009 (Senate Bill X7-7)

SB X7-7, enacted in November 2009, requires all water suppliers increase their water use efficiency. It set an overall goal of reducing per capita urban water use by 20% by December 31, 2020. SB X7-7 required the state to make incremental progress by reducing per capita water usage by at least 10% by December 31, 2015.

The measure covers projects divided into five teams that work on three types of project: urban water projects, agriculture projects, and urban and agriculture projects. The urban team focused on several measures, including reducing per capita urban water use by 20% by December 31, 2020, and revising loan/grant criteria for water suppliers so that they will be ineligible for funding without complying with the regulations set by the California Department of Water Resources.

The California Department of Water Resources adopted a regulation on February 16, 2011, that sets forth criteria and methods for exclusion of industrial process water from the calculation of gross water use for purposes of urban water management planning. The regulation applies to all urban retail water suppliers required to submit an Urban Water Management Plan, as set forth in California Water Code Sections 10617 and 10620.

Senate Bill 1389

SB 1389 (Bowen, Chapter 568, Statutes of 2002) requires CEC to prepare a biennial Integrated Energy Policy Report (IEPR) that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors. The IEPR also provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (California Public Resources Code Section 25301a). CEC prepares these assessments and associated policy recommendations every 2 years, with updates in alternate years, as part of the IEPR.

The 2020 IEPR was adopted March 23, 2020, and continues to work toward improving electricity, natural gas, and transportation fuel energy use in California. The 2020 IEPR identifies actions the state and others can take to ensure a clean, affordable, and reliable energy system. California's innovative energy policies strengthen energy resiliency, reduce GHG emissions that cause climate change, improve air quality, and contribute to a more equitable future (CEC 2020).

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of executive orders.

Executive Order S-3-05

On June 1, 2005, Governor Schwarzenegger announced the following reduction targets for GHG emissions through EO S-3-05:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80% below 1990 levels

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07 – Low-Carbon Fuel Standard

Governor Schwarzenegger signed EO S-01-07 on January 18, 2007. The order mandated that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. In particular, the executive order established an LCFS and directed the Secretary for Environmental Protection to coordinate the actions of CEC, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis-supporting development of the protocols was included in the State Implementation Plan for Alternative Fuels (State Alternative Fuels Plan adopted by CEC on December 24, 2007) and was submitted to CARB for consideration as an "early action" item under AB 32. CARB adopted the LCFS on April 23, 2009.

The LCFS was challenged in the U.S. District Court in Fresno in 2011. The court's ruling issued on December 29, 2011, included a preliminary injunction against CARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012, pending final ruling on appeal, allowing CARB to continue to implement and enforce the regulation. The Ninth Circuit Court's decision, filed September 18, 2013, vacated the preliminary injunction. In essence, the court held that the LCFS adopted by CARB was not in conflict with federal law. On August 8, 2013, the Fifth District Court of Appeal (California) ruled that CARB had failed to comply with CEQA and the Administrative Procedure Act when adopting regulations for the LCFS. In a partially published opinion, the Court of Appeal reversed the trial court's judgment and directed issuance of a writ of mandate setting aside Resolution 09-31 and two executive orders of CARB approving LCFS regulations promulgated to reduce GHG emissions. However, the court tailored its remedy to protect the public interest by allowing LCFS regulations to remain operative while CARB complies with the procedural requirements it had failed to satisfy.

To address the court ruling, CARB was required to bring a new LCFS regulation to the Executive Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS, as well as new provisions designed to foster investments in the production of the low-carbon-intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015, the Office of Administrative Law approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for 2030. The amendments included crediting opportunities to promote zero-emission-vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

Executive Order S-13-08

EO S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the executive order, the 2009 California Climate Adaptation Strategy was adopted, which is the "first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued EO B-30-15 to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor's executive order aligned California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris in late 2015. The executive order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 to ensure that California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the Scoping Plan to express the 2030 target in terms of MMT CO₂e. The executive order also requires the Safeguarding California Plan, the state's climate adaptation plan to be updated every 3 years, and for the state to continue its climate change research program, among other provisions. As with EO S-3-05, this executive order is not legally enforceable for local governments or the private sector.

Legislation that would update AB 32 to make post-2020 targets and requirements a mandate is in process in the California State Legislature.

Executive Order B-55-18 and Senate Bill 100

SB 100 and EO B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing RPS, 25% of retail sales are required to be from renewable sources by December 31, 2016; 33% by December 31, 2020; 40% by December 31, 2024; 45% by December 31, 2027; and 50% by December 31, 2030. SB 100 raises California's RPS requirement to a 50% renewable resources target by December 31, 2026, and to a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, EO B-55-18 establishes a carbon neutrality goal for California by 2045 and sets a goal to maintain net negative emissions thereafter. The executive order directs the California Natural Resources Agency, California EPA, California Department of Food and Agriculture, and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat, even with rapid population growth.

CCR Title 20

Division 2, Chapter 4, Article 4, Sections 1601–1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for federally regulated appliances and non-federally regulated appliances. A total of 23 categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

CCR Title 24

Part 6: California's Energy Code was first adopted 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.

Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2009, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recently approved update consisting of the 2019 California Green Building Code Standards that became effective January 1, 2020. Local jurisdictions are permitted to adopt more stringent requirements, and state law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction waste and demolition ordinances, and defers to them as the ruling guidance, provided they establish a minimum 65% diversion requirement. CALGreen also provides exemptions for areas not served by construction waste and demolition

recycling infrastructure. The California Building Code provides the minimum standard that buildings must meet to be certified for occupancy, which is generally enforced by the local building official.

Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2022 version of Title 24 was adopted by CEC in August 2022 and became effective on January 1, 2023. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code. CEC anticipates that the 2022 Energy Code will provide \$1.5 billion in consumer benefits and reduce GHG emissions by 10 MMT. The Proposed Project would be required to comply with the applicable standards in place at the time plan check submittals are made. Under the current Energy Code, these require the following, among other items (Appendix G):

- **Short-term bicycle parking.** If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passersby, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- **Long-term bicycle parking.** For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- **Designated parking for clean air vehicles.** In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- **EV charging stations.** New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106.5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty EV supply equipment for warehouses, grocery stores, and retail stores.
- **Outdoor light pollution reduction.** Outdoor lighting systems shall be designed to meet the backlight, uplight, and glare ratings per Table 5.106.8 (5.106.8).
- **Construction waste management.** Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- **Excavated soil and land clearing debris.** 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reuse or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- **Recycling by Occupants.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- **Water conserving plumbing fixtures and fittings.** Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:

- **Water Closets.** The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
- **Urinals.** The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
- **Showerheads.** Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute (gpm) and 80 pounds per square inch (psi) (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gpm at 80 psi (5.303.3.3.2)
- **Faucets and fountains.** Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gpm at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gpm at 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gpm (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- **Outdoor potable water uses in landscaped areas.** Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELo), whichever is more stringent (5.304.1).
- **Water meters.** Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 square feet or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (GPD) (5.303.1.1 and 5.303.1.2).
- **Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 square feet.** Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit shall comply with Section 5.304.2, Item 1 or 2 (5.304.3).
- **Commissioning.** For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

Model Water Efficient Landscape Ordinance

The MWELo was required by AB 1881, the Water Conservation Act. AB 1881 required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the MWELo by January 1, 2010. Reductions in water use of 20% consistent with the SB X-7-7 mandate are expected upon compliance with the ordinance. Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed the California Department of Water Resources to update the MWELo through expedited regulation. The California Water Commission approved the revised MWELo on July 15, 2015, effective December 15, 2015. New development projects that include landscape areas of 500 square feet or more are subject to the MWELo. The update requires the following:

- More efficient irrigation systems
- Incentives for graywater usage
- Improvements in on-site stormwater capture
- Limiting the portion of landscapes that can be planted with high-water-use plants
- Reporting requirements for local agencies

CARB Refrigerant Management Program

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring; leak repair; system retirement and retrofitting; reporting and recordkeeping; and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in 17 CCR 95380–95398. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high-GWP refrigerant. The refrigerant management program is designed to reduce emissions of high-GWP refrigerants from leaky stationary, nonresidential refrigeration equipment; reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and verify GHG emission reductions.

Tractor-Trailer GHG Regulation

The tractors and trailers subject to this regulation must either use EPA SmartWay-certified tractors and trailers or retrofit their tractors and trailers with SmartWay-verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including dry-van and refrigerated-van trailers, and owners of the tractors that pull the trailers on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low-rolling-resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors must use SmartWay-verified low-rolling-resistance tires. There are also requirements for trailers to have low-rolling-resistance tires and aerodynamic devices.

Phase 1 and 2 Heavy-Duty Vehicle GHG Standards

CARB adopted a regulation for GHG emissions from heavy-duty trucks and engines sold in California. It establishes GHG emissions limits on truck and engine manufacturers and harmonizes with the EPA rule for new trucks and engines nationally. Existing heavy-duty-vehicle regulations in California include engine criteria emissions standards; tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer GHG Regulation); and in-use fleet retrofit requirements, such as the Truck and Bus Regulation. In September 2011, EPA adopted its rule for heavy-duty trucks and engines. The EPA rule has compliance requirements for compression and spark ignition engines, as well as trucks from Class 2b through Class 8. Compliance requirements began with model year 2014, with stringency levels increasing through model year 2018. The rule organizes truck compliance into three groupings: heavy-duty pickups and vans, vocational vehicles, and combination tractors. The EPA rule does not regulate trailers.

CARB staff have worked jointly with EPA and NHTSA on the next phase of federal GHG emissions standards for medium-duty trucks and heavy-duty trucks, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emissions standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later-model-year heavy-duty trucks, including trailers. EPA and NHTSA have proposed to roll back GHG and fuel economy standards for cars and light-duty trucks, which suggests that a similar rollback of Phase 2 standards for medium-duty trucks and heavy-duty trucks may be pursued.

Senate Bill 97 and the CEQA Guidelines

Passed in August 2007, SB 97 added California Public Resources Code Section 21083.05, which states, “(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division,

including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR [Office of Planning and Research] pursuant to subdivision (a).”

In 2012, California Public Resources Code Section 21083.05 was amended to state the following:

The Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption, to incorporate new information or criteria established by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

On December 28, 2018, the California Natural Resources Agency announced that the Office of Administrative Law approved the amendments to the CEQA Guidelines for implementing CEQA. The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change.

Section 15064.4 was added to the CEQA Guidelines and states that in determining the significance of a project’s GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of a project’s emissions to the effects of climate change. A project’s incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national, or global emissions. The agency’s analysis should consider a timeframe that is appropriate for that project. The agency’s analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. Additionally, a lead agency may use a model or methodology to estimate GHG emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project’s incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) is a long-range transportation plan that is developed and updated by SCAG every 4 years. The RTP provides a vision for transportation investments throughout the region. The SCS will integrate land use and transportation strategies that will achieve GHG emissions reduction targets that are forecasted to achieve reduction in GHG emissions to achieve the state’s GHG reduction goals.

On September 3, 2020, the SCAG Regional Council adopted Connect SoCal (2020–2045 RTP/SCS; SCAG 2020). Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians (SCAG 2020). Connect SoCal establishes GHG emissions goals for

automobiles and light-duty trucks for 2035 and 2045 and establishes an overall GHG target for the region consistent with both the statewide GHG-reduction targets for the post-2020 statewide GHG reduction goals. Connect SoCal is a long-range visioning plan to encourage and promote the safe and efficient management, operation, and development of a regional intermodal transportation system that, when linked with appropriate land use planning, will serve the mobility needs of goods and people. Future investments seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices. Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding. In addition, Connect SoCal is supported by a combination of transportation and land use strategies that help the region achieve state GHG emission reduction goals and federal CAA requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and use resources more efficiently.

South Coast Air Quality Management District

The project site is within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD is the agency responsible for air quality planning and regulation in the South Coast Air Basin. SCAQMD addresses the impacts to climate change of projects subject to an SCAQMD permit as the lead agency if it is the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for a project. SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so SCAQMD helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the South Coast Air Basin. The Working Group identified several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold (SCAQMD 2009), but no thresholds for CEQA land use development projects were adopted. The Working Group has not convened a meeting since November 2009, nor has the Working Group provided additional guidance since release of the interim guidance in 2008.

Local

March Joint Powers Authority General Plan

The Noise/Air Quality Element of the March JPA General Plan includes goals and policies that will be applied to the Proposed Project related to GHG emissions. Consistency with these goals and policies are discussed in Section 3.10, Land Use and Planning, of this EIR. The following goals and policies from the Noise/Air Quality Element apply to the Proposed Project (March JPA 1999):

Goal 3: Reduce air pollution through proper land use, transportation, and energy use planning.

Policy 3.4: Encourage ride share programs.

Goal 6: Reduce emissions associated with vehicle/engine use.

Policy 6.1: Reduce idling emissions by increasing traffic flow through synchronized traffic signals.

Policy 6.3: Encourage diversion of peak hour truck traffic, whenever feasible, to off-peak periods to reduce roadway congestion and associated emissions.

Policy 6.4: Work with Caltrans [California Department of Transportation] and traffic engineers to ensure that roadways and freeway on-ramps that are heavily utilized by trucks are designed to safely accommodate trucks.

Policy 6.5: Encourage trucks operating within March JPA Planning Area to maintain safety equipment and operate at safe speeds so as to reduce the potential for accidents which create congestion and related emissions.

Policy 6.6: Reduce vehicle emissions through improved parking design and management that provide for safe pedestrian access to and from various facilities.

Policy 6.8: Encourage the use of compressed natural gas, clean diesel and/or alternative fuels in engines.

Goal 7: Reduce emissions associated with energy consumption.

Policy 7.1: Support the use of energy-efficient equipment and design in the March JPA Planning Area for facilities and infrastructure.

Policy 7.2: Encourage incorporation of energy conservation features in development.

Policy 7.3: Support passive solar design in new construction.

Policy 7.4: Support recycling programs which reduce emissions associated with manufacturing and waste disposal.

Policy 7.5: Support drought-resistant vegetation in landscaping areas to reduce energy needed to pump water.

County of Riverside Climate Action Plan

The County of Riverside (County) adopted its updated CAP on December 17, 2019. The CAP was designed under the premise that the County, and the community it represents, is uniquely capable of addressing emissions associated with sources under the County's jurisdiction, and that the County's emission reduction efforts should coordinate with the state strategies of reducing emissions to accomplish these reductions in an efficient and cost-effective manner. The County plans to reduce community-wide emissions to 3,576,598 MT CO₂e per year by 2030 (County of Riverside 2019).

The project site is located in the jurisdiction of the March JPA within Riverside County. The County does not have direct authority over the Proposed Project; as such, consistency with the County's CAP is provided only for informational purposes to illustrate how the Proposed Project has been designed to reduce GHG emissions.

To evaluate consistency with the CAP, the County provides screening tables to aid in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated into development projects. The CAP contains a menu of measures potentially applicable to discretionary development that include energy conservation, water use reduction, increased residential density or mixed uses, transportation management, and solid waste recycling. Individual sub-measures are assigned a point value within the overall screening table of GHG implementation measures. The point values are adjusted according to the intensity of action items with modest adoption/installation (those that reduce GHG emissions by modest amounts) worth the least number of points, and greatly enhanced adoption/installation worth the most (County of Riverside 2019). Projects that garner at least

100 points (equivalent to an approximate 49% reduction in GHG emissions) are determined to be consistent with the reduction quantities anticipated in the County's CAP Update, and consequently would be consistent with the CAP.

3.7.3 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's impacts related to GHG emissions are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, as applicable, the March JPA CEQA Guidelines (March JPA 2022). For the purposes of this EIR, a significant impact related to GHG emissions would occur if the Proposed Project would:

- GHG-1** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- GHG-2** Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

For GHG-1, in the absence of any adopted quantitative threshold, March JPA, as the lead agency, has determined that the Proposed Project's GHG emissions would not have a significant effect on the environment if the Proposed Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions as evaluated in GHG-2.

For GHG-2, the Proposed Project was evaluated for the following:

- Consistency with AB 32/SB 32 through evaluating the Proposed Project's consistency and compliance with applicable statewide and local regulatory programs designed to reduce GHG emissions consistent with AB 32/SB 32.
- Consistency with SB 375. Consistency with SB 375 was evaluated based on the growth assumptions of SCAG's Connect SoCal. With regard to individual developments, strategies, and policies set forth in Connect SoCal, the Proposed Project will discuss consistency with the following three categories:
 - Reduction of vehicle trips and VMT
 - Increased use of alternative fuel vehicles
 - Improved energy efficiency

Approach and Methodology

Land uses such as the Proposed Project affect GHG emissions through construction and operational source emissions.

In May 2022, SCAQMD, in conjunction with the California Air Pollution Control Officers Association and other California air districts, released CalEEMod Version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, CalEEMod has been used for this Proposed Project to determine GHG emissions. Output from the model runs for construction and operational activity is provided in Appendix G. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, on-site cargo handling equipment, water, and waste. Aircraft emissions were estimated using FAA's AEDT Version 3C (see Appendix B-1), as explained below.

Construction Emissions

The construction emissions rely on the assumptions and details for construction criteria air pollutants discussed in Section 3.2, Air Quality, and Appendix B-1 (Air Quality Report) of this EIR. As such, refer to Section 3.2 or Appendix B-1 for a discussion of construction emissions calculation methodology and assumptions.

Operational Emissions

Operational activities associated with the Proposed Project would result in emissions of CO₂, CH₄, and N₂O from area, energy, mobile, water supply treatment and distribution, and solid waste sources, refrigerants, on-site cargo-handling equipment, and aircraft emissions.

Proposed Project operations and project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Proposed Project by Southern California Gas, and electricity would be supplied to the Proposed Project by Southern California Edison.

Trip characteristics available from the Proposed Project's Traffic Analysis (Appendix M-1) were used in this analysis. The Proposed Project is expected to generate approximately 1,276 one-way vehicular trips per day (638 trips inbound and 638 trips outbound), including 276 one-way truck trips per day (138 truck trips inbound and 138 truck trips outbound) during non-peak operations, and approximately 1,880 one-way vehicular trips per day (940 trips inbound and 940 trips outbound), including 408 one-way truck trips per day (204 truck trips inbound and 204 truck trips outbound), during peak operations.

The average trip length for light heavy-duty trucks, medium heavy-duty trucks, and heavy heavy-duty trucks used for this analysis has been obtained from SCAQMD's Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program (May 2021). SCAQMD's Rule 2305 is based on a 15.3-mile trip length for light heavy-duty trucks, 14.2-mile trip length for medium heavy-duty trucks, and 39.9-mile trip length for heavy heavy-duty trucks. As such, a weighted average one-way trip length for trucks of 28.54 and 28.55 miles was utilized for Non-Peak and Peak, respectively. The project-specific passenger car fleet mix used in this analysis is based on a proportional split using the default CalEEMod percentages assigned to light-duty automobile, light-duty truck type 1, light-duty truck type 2, and medium-duty vehicle types. The truck types (light heavy-duty trucks, medium heavy-duty trucks, and heavy heavy-duty trucks) were broken down consistent with the Proposed Project's Traffic Analysis (Appendix M-1).

The cargo handling equipment is assumed to have a range of approximately 200 hp. Based on the latest available information from the SCAQMD, high-cube warehouse projects typically have 3.6 yard-trucks per 1 million square feet of building space (SCAQMD 2014). For the Proposed Project, on-site modeled operational equipment included up to one 200 hp compressed natural gas or gasoline-powered yard tractor operating at 4 hours a day for 365 days of the year.⁴ To account for emissions associated with the on-site yard tractor, the information was input into CalEEMod under the on-site equipment screen as 200 hp tractor/loader/backhoes with a load factor of 0.37 and a selection of natural gas as the fuel type. The resulting emissions calculations in CalEEMod from on-site equipment are the same for both compressed natural gas and gasoline-powered equipment for this category.

⁴ CalEEMod assigns the same emissions values to gasoline and compressed natural gas. Additionally, the specific fuel type is unknown. Tractor/loader/backhoe was used because there is no specific yard truck or yard hostler equipment type in CalEEMod. The horsepower and load factors have been modified commensurate with SCAQMD recommendations.

Aircraft-related operational emissions are based on project-specific data and modeled using AEDT Version 3C. Aircraft emissions calculations, which include refueling of aircraft, available from the Air Quality Report, were used in this analysis (Appendix B-1).

Aircraft characteristics included 10,608 annual operations (5,304 arrivals and 5,304 departures) by the Boeing 767-300 aircrafts and the CO_{2e} equivalency method of calculating GWP for CH₄, N₂O, and CO₂.⁵ Refueling of aircrafts that would use the proposed facilities would occur on site. Aircraft fuel would be trucked from the existing March JPA aircraft fuel farm located off site; emissions associated with the trucked fuel are included in AEDT. Although these hours are not proposed for the Proposed Project, this analysis assumed that the cargo building would operate 24 hours daily for 7 days per week to present a conservative approach.

Air-conditioning equipment associated with the building is anticipated to generate GHG emissions. CalEEMod automatically generates a default air-conditioning equipment inventory for each project land use subtype based on industry data from EPA (EPA 2016). CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. No storage, including cold storage, is included as part of the Proposed Project.

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water and the sources of the water. CalEEMod default parameters were used to estimate GHG emissions associated with water supply, treatment, and distribution for the Project scenario.

GHG emissions from waste generation were also calculated in CalEEMod. Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by CalRecycle. CalEEMod based solid waste generation on a 2008 waste characterization study. Since the publication of the 2008 survey, statewide diversion has increased by approximately 25%. This additional reduction has been included in the modeling.

3.7.4 Impacts Analysis

Threshold GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

and

Threshold GHG-2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less-Than-Significant Impact with Mitigation Incorporated. The following discussion evaluates the Proposed Project's potential to conflict with applicable GHG reduction plans and policies.

Consistency with Applicable GHG Emissions Reduction Plans, Policies, and Regulations

Pursuant to Section 15064.4 of the CEQA Guidelines, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, the Proposed Project's consistency with the 2022 Scoping Plan, the 2017 Scoping Plan (SB 32), the 2008

⁵ As there is no proposed tenant at this time, the proposed flight operations scenarios reflect a fleet consisting of Boeing 767-300 aircraft, which is a typical plane utilized in air cargo operations.

Scoping Plan (AB 32), and the Connect SoCal RTP/SCS (SB 375) is discussed below. Because the Proposed Project is not subject to the County CAP, information regarding the Project’s consistency with the County CAP is therefore provided for informational purposes only following the main consistency discussion.

2022 Scoping Plan Consistency

The 2022 Scoping Plan lays out a path not just to carbon neutrality by 2045 but also to the 2030 GHG emissions reduction target of 40% below 1990 levels. Table 3.7-4 highlights the measures from the 2022 Scoping Plan that are relevant to the Project.

Table 3.7-4. 2022 Scoping Plan Consistency Summary

Action	Responsible Parties	Potential to Conflict
Smart Growth / VMT – VMT per capita reduced 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045	CARB, SCAG	Consistent. As discussed in Section 3.12, Transportation, the Proposed Project’s VMT per employee of 23.12 is below the WRCOG significance threshold of 25.47 VMT per employee (i.e., approximately 9.23% below the threshold). Further, under MM-AQ-5 (Commute Trip Reduction), any tenant agreement must require 5% parking spaces reserved for car/vanpools, provision of short- and long-term bicycle parking facilities, end-of-trip facilities, and on-site food vending machines or kitchen facilities, and the establishment of a rideshare program with financial incentives. The Proposed Project would not obstruct or interfere with agency efforts to meet this regional VMT reduction goal, including through implementation of SB 375. As detailed below, the Proposed Project would be consistent with the SCAG 2020–2045 RTP/SCS, which is the regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks in the Southern California Region pursuant to SB 375.
Light-duty Vehicle (LDV) Zero Emission Vehicles (ZEVs) – 100% of LDV sales are ZEV by 2035	CARB	Consistent. The Proposed Project would support the transition from fossil fuel LDV to ZEV through its provision of EV chargers (MM-GHG-1). The Proposed Project would not obstruct or interfere with implementation of LDV ZEV sales goals.
Truck ZEVs – 100% of medium-duty vehicle (MDV)/heavy-duty vehicle (HDV) sales are ZEV by 2040	CARB	Consistent. MM-AQ-4 requires the Project’s main electrical supply lines and panels be sized to support “clean fleet” charging facilities, including heavy-duty and delivery trucks. As this action pertains to MDV and HDV sales within California, the Proposed

Table 3.7-4. 2022 Scoping Plan Consistency Summary

Action	Responsible Parties	Potential to Conflict
		Project would not obstruct or interfere with its implementation.
<p>Electricity Generation – Sector GHG target of 38 million metric tons of carbon dioxide equivalent (MMT CO₂e) in 2030 and 30 MMT CO₂e in 2035</p> <p>Retail sales load coverage¹</p> <p>20 gigawatts (GW) of offshore wind by 2045</p> <p>Meet increased demand for electrification without new fossil gas-fired resources</p>	CARB	Consistent. As this action pertains to the statewide procurement of renewably generated electricity, the Proposed Project would not obstruct or interfere with its implementation.
<p>New Residential and Commercial Buildings – All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030</p>	CARB	Consistent. The Proposed Project would not obstruct or interfere with agency efforts to meet the all-electric appliance and heat pump goals.
<p>Construction Equipment – 25% of energy demand electrified by 2030 and 75% electrified by 2045</p>		Consistent. During construction, MM-AQ-2 requires the use of electric-powered hand tools, forklifts, and pressure washers, to the extent feasible, along with a designated area for charging said equipment. As this action pertains to the electrification of off-road equipment across California, the Proposed Project would not obstruct or interfere with its implementation.
<p>Low Carbon Fuels for Transportation – Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen</p>	CARB	Consistent. The Proposed Project would not obstruct or interfere with agency efforts to increase the provision of low carbon fuels for transportation.
<p>Low Carbon Fuels for Buildings and Industry –</p> <p>In 2030s biomethane blended in pipeline</p> <p>Renewable hydrogen blended in fossil gas pipeline at 7% energy (~20% by volume), ramping up between 2030 and 2040</p> <p>In 2030s, dedicated hydrogen pipelines constructed to serve certain industrial clusters</p>	CARB	Consistent. The Proposed Project would not obstruct or interfere with agency efforts to increase the provision of low-carbon fuels for use in buildings and industry.

Table 3.7-4. 2022 Scoping Plan Consistency Summary

Action	Responsible Parties	Potential to Conflict
High GWP Potential Emissions – Low GWP refrigerants introduced as building electrification increases, mitigating HFC emissions	CARB	Consistent. The Proposed Project would not obstruct or interfere with agency efforts to introduce low GWP refrigerants.

Source: CARB 2022b.

Notes: VMT = vehicle miles traveled; CARB = California Air Resources Board; SCAG = Southern California Association of Governments; SB = Senate Bill; RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy; GHG = greenhouse gas; EV = electric vehicle; MM = Mitigation Measure; GWP = global warming potential; HFC = hydrofluorocarbon.

As noted in Table 2-1 of the 2022 Scoping Plan, SB 100 speaks only to retail sales and state agency procurement of electricity (i.e., wholesale or non-retail sales and losses from storage and transmission and distribution lines are not subject to the law).

As shown above, the Proposed Project would not impede the state’s progress toward carbon neutrality by 2045 under the 2022 Scoping Plan. The Proposed Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Some of the current transportation sector policies the Proposed Project will comply with (through vehicle manufacturer compliance) include the following: Advanced Clean Cars II, Advanced Clean Trucks, Advanced Clean Fleets, Zero Emission Forklifts, the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-Use Off-Road Diesel-Fueled Fleets Regulation, Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation, carbon pricing through the Cap-and-Trade Program, and the LCFS. Further, the Proposed Project will implement **MM-AQ-2** through **MM-AQ-6** and **MM-GHG-1**, which are discrete mitigation measures aimed at reducing criteria air pollutant and GHG emissions (refer to Section 3.2.5 for the full text of **MM-AQ-2** through **MM-AQ-6**; **MM-GHG-1** is provided in Section 3.7.5, Mitigation Measures, of this section). Implementation of **MM-AQ-2** (Construction Requirements), **MM-AQ-3** (Improved Energy Efficiency and Water Reduction), **MM-AQ-4** (Truck Requirements), **MM-AQ-5** (Commute Trip Reduction), and **MM-AQ-6** (Additional Air Quality Tenant Requirements) will reduce air pollutant emissions associated with the Proposed Project as described in Section 3.2, Air Quality, and implementation of **MM-GHG-1** (Installation of EV Charging Stations) will reduce GHG emissions.

2017 Scoping Plan Consistency

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels set by EO B-30-15 and codified by SB 32 (CARB 2017). Table 3.7-5 summarizes the Proposed Project’s consistency with the 2017 Scoping Plan. As summarized, the Proposed Project would not conflict with any of the provisions of the 2017 Scoping Plan.

Table 3.7-5. 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	CPUC, CEC, CARB	Consistent. The Proposed Project would use energy from Southern California Edison (SCE). SCE has committed to diversifying its portfolio of energy sources by increasing energy from wind and solar

Table 3.7-5. 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
		sources. The Proposed Project would not interfere with or obstruct SCE energy source diversification efforts.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	CPUC, CEC, CARB	Consistent. Under MM-AQ-3 (Improved Energy Efficiency and Water Reduction), the Proposed Project would be designed and constructed to implement the energy efficiency measures for new commercial developments and would include several measures designed to reduce energy consumption. The Proposed Project would not interfere with or obstruct policies or strategies to establish annual targets for statewide energy efficiency savings and demand reduction.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.	CPUC, CEC, CARB	Consistent. Under MM-AQ-3 , the Proposed Project would be designed and constructed to implement energy efficiency measures acting to reduce electricity consumption. The Proposed Project would include energy-efficient lighting and fixtures that meet the current Title 24 Standards. Further, the Proposed Project proposes contemporary industrial facilities that would incorporate energy-efficient boilers, heaters, and air-conditioning systems.
Implement Mobile Source Strategy (Cleaner Technology and Fuels)		
At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025.	CARB, CalSTA, SGC, Caltrans, CEC, OPR, local agencies	Consistent. This is a CARB Mobile Source Strategy. Under MM-GHG-1 , the Proposed Project would install the circuitry, capacity, and equipment for EV charging stations in accordance with Tier 2 of the 2022 CALGreen Code. The Proposed Project would not obstruct or interfere with CARB zero emission or plug-in hybrid light-duty EV 2025 targets.
At least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.	CARB, CalSTA, SGC, Caltrans, CEC, OPR, local agencies	Consistent. This is a CARB Mobile Source Strategy. Under MM-GHG-1 , the Proposed Project would install the circuitry, capacity, and equipment for EV charging stations in accordance with Tier 2 of the 2022 CALGreen Code. The Proposed Project would not obstruct or interfere with CARB zero emission or plug-in hybrid light-duty EV 2030 targets.

Table 3.7-5. 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Cars (ACC) regulations.	CARB, CalSTA, SGC, Caltrans, CEC, OPR, local agencies	Consistent This is a CARB Mobile Source Strategy. The Proposed Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing ACC regulations.
Medium- and Heavy-Duty GHG Phase 2.	CARB, CalSTA, SGC, Caltrans, CEC, OPR, local agencies	Consistent. This is a CARB Mobile Source Strategy. The Proposed Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2.
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO _x standard.	CARB, CalSTA, SGC, Caltrans, CEC, OPR, local agencies	Consistent. This is a CARB Mobile Source Strategy. The Proposed Project would not obstruct or interfere with CARB efforts to improve transit-source emissions.
Last Mile Delivery: New regulation that would result in the use of low NO _x or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3–7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.	CARB, CalSTA, SGC, Caltrans, CEC, OPR, local agencies	Consistent. This is a CARB Mobile Source Strategy. The Proposed Project would not obstruct or interfere with CARB efforts to improve last-mile delivery emissions.
Further reduce vehicle miles traveled (VMT) through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document “Potential VMT Reduction Strategies for Discussion.”	CARB, CalSTA, SGC, Caltrans, CEC, OPR, local agencies	Consistent. As discussed in Section 3.12, Transportation, the Proposed Project’s VMT per employee of 23.12 is below the WRCOG significance threshold of 25.47 VMT per employee (i.e., approximately 9.23% below the threshold). Further, under MM-AQ-5 (Commute Trip Reduction), any tenant agreement must require 5% parking spaces reserved for car/vanpools, provision of short- and long-term bicycle parking facilities, end-of-trip facilities, and on-site food vending machines or kitchen facilities, and the establishment of a rideshare program with financial incentives. The Proposed Project would not obstruct or interfere

Table 3.7-5. 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
		with implementation of SB 375 and would therefore not conflict with this measure.
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	CARB	Consistent. This is a CARB Mobile Source Strategy. The Proposed Project would not obstruct or interfere with CARB efforts to increase stringency of the SB 375 Sustainable Communities Strategy (2035 targets).
By 2019, Adjust Performance Measures Used to Select and Design Transportation Facilities		
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g., via guideline documents, funding programs, project selection).	CalSTA, SGC, OPR, CARB, GO-Biz, California Infrastructure and Economic Development Bank, Department of Finance, CTC, Caltrans	Consistent. The Proposed Project would not obstruct or interfere with agency efforts to harmonize transportation facility project performance with emissions reductions or increase competitiveness of transit and active transportation modes.
By 2019, develop pricing policies to support low-GHG transportation (e.g., low-emission vehicle III zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	Consistent. The Proposed Project would not obstruct or interfere with agency efforts to develop pricing policies to support low-GHG transportation.
Implement California Sustainable Freight Action Plan		
Improve freight system efficiency.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	Consistent. This measure would apply to all trucks accessing the project site. This may include existing trucks or new trucks that are part of the statewide goods movement sector. The Proposed Project would not obstruct or interfere with agency efforts to improve freight system efficiency.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	Consistent. MM-AQ-4 requires the Project's main electrical supply lines and panels be sized to support "clean fleet" charging facilities, including heavy-duty and delivery trucks.
Adopt an LCFS with a carbon intensity reduction of 18%.	CARB	Consistent. When adopted, this measure would apply to all fuel purchased and used by the Proposed Project in the state. The Proposed Project would not obstruct or interfere with agency efforts to adopt an LCFS with a carbon intensity reduction of 18%.

Table 3.7-5. 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
Implement the Short-Lived Climate Pollutant Strategy by 2030		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, SWRCB, local air districts	Consistent. The Proposed Project would be required to comply with this measure and reduce any project-source Short-Lived Climate Pollutant Strategy (SLCPS) emissions accordingly. The Proposed Project would not obstruct or interfere with agency efforts to reduce SLCPS emissions.
50% reduction in black carbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, SWRCB, local air districts	
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCPS and SB 1383.	CARB, CalRecycle, CDFA, SWRCB, local air districts	Consistent. The Proposed Project would implement waste reduction and recycling measures consistent with state and County of Riverside requirements. MM-AQ-3 requires that tenants provide information to employees and truck drivers, as appropriate, regarding building efficiency, solid waste reduction, recycling, and water conservation. The Proposed Project would not obstruct or interfere with agency efforts to support organic waste landfill reduction goals in the SLCPS or SB 1383.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	Consistent. The Proposed Project would be required to comply with any applicable Cap-and-Trade Program provisions. The Proposed Project would not obstruct or interfere with agency efforts to implement the post-2020 Cap-and-Trade Program.
By 2018, Develop Integrated Natural and Working Lands Implementation Plan to Secure California's Land Base as a Net Carbon Sink		
Protect land from conversion through conservation easements and other incentives.	CNRA, departments within CDFA, CalEPA, CARB	Consistent. The project site is designated for industrial uses. The Proposed Project does not propose land conversion. The Proposed Project would not obstruct or interfere with agency efforts to protect land from conversion through conservation easements and other incentives.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity		Consistent. The project site is partially developed and does not comprise an area that would effectively provide for carbon sequestration. The Proposed Project would not obstruct or interfere with agency efforts to increase the long-term resilience of carbon storage in the land base or enhance sequestration capacity.

Table 3.7-5. 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments		Consistent. Where appropriate, project design would incorporate wood or wood products. The Proposed Project would not obstruct or interfere with agency efforts to encourage use of wood or agricultural products to increase the amount of carbon stored in the natural and built environments.
Establish scenario projections to serve as the foundation for the Implementation Plan		Consistent. The Proposed Project would not obstruct or interfere with agency efforts to establish scenario projections to serve as the foundation for the Implementation Plan.
Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018	CARB	Consistent. CARB adopted the California 2030 Natural and Working Lands Climate Change Implementation Plan in 2019. As such, the Proposed Project would not obstruct or interfere with agency efforts to establish a carbon accounting framework for natural and working lands as described in the plan.
Implement Forest Carbon Plan	CNRA, CAL FIRE, CalEPA	Consistent. The Proposed Project would not obstruct or interfere with agency efforts to implement the Forest Carbon Plan.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State and local agencies	Consistent. The Proposed Project would not obstruct or interfere with agency efforts to identify and expand funding and financing mechanisms to support GHG reductions across all sectors.

Sources: CARB 2017; Appendix G.

Notes: SB = Senate Bill; CPUC = California Public Utilities Commission; CEC = California Energy Commission; CARB = California Air Resources Board; GHG = greenhouse gas; CalSTA = California State Transportation Agency; SGC = Strategic Growth Council; Caltrans = California Department of Transportation; OPR = Governor’s Office of Planning and Research; NO_x = oxides of nitrogen; ZEV = zero-emission vehicle; GO-Biz = Governor’s Office of Business and Economic Development; CTC = California Transportation Commission; CalEPA = California Environmental Protection Agency; CNRA = California Natural Resources Agency; LCFS = Low Carbon Fuel Standard; CDFA = California Department of Food and Agriculture; SWRCB = State Water Resources Control Board; CAL FIRE = California Department of Forestry and Fire Protection.

As shown in Table 3.7-5, the Proposed Project would not conflict with any of the 2017 Scoping Plan elements, because any regulations adopted would apply directly or indirectly to the Proposed Project. Further, recent studies show that the state’s existing and proposed regulatory framework, as discussed in Section 3.7.2, Relevant Plans, Policies, and Ordinances, would allow the state to reduce its GHG emissions level to 40% below 1990 levels by 2030 (LBNL 2015b).

2008 Scoping Plan (AB 32) Consistency

The Project would not conflict with the applicable statewide regulatory programs designed to reduce GHG emissions consistent with AB 32, as described in Table 3.7-6.

Table 3.7-6. 2008 Scoping Plan and AB 32 Regulatory Program Consistency Summary

Regulatory Program	Project-Level Consistency Evaluation
Construction	
CARB In-Use Off-Road Regulation	Consistent. Off-road equipment used for construction of the Proposed Project will utilize equipment in compliance with CARB Airborne Toxic Control Measures.
Mobile Sources	
California Assembly Bill 1493 (Pavley Standards)	Consistent. This regulatory program applies to vehicle manufacturers, and not directly to land use development. However, the vehicles operated by future occupants of and visitors to the Project would benefit from and be consistent with this regulatory program in the form of reduced GHG emissions from the vehicle fleet for model years 2017 through 2025.
Advanced Clean Cars Program	Consistent. This regulatory program applies to vehicle manufacturers, and not directly to land use development. However, the vehicles operated by future occupants of and visitors to the Project would benefit from and be consistent with this regulatory program in the form of reduced GHG emissions from the vehicle fleet for model years 2017 through 2025.
Low Carbon Fuel Standard Regulation	Consistent. This regulatory program applies to fuel suppliers, and not directly to land use development. However, the vehicles operated by future occupants of and visitors to the Project would benefit from and be consistent with this regulatory program in the form of reduced GHG emissions from the vehicle fleet.
Heavy-Duty Vehicle GHG Emission Reduction Regulation	Consistent. This regulatory program is intended to reduce fuel use and GHG emissions from medium- and heavy-duty vehicles, semi-trucks, pickup trucks and vans, and all types and sizes of work trucks and buses in between.
CARB In-Use On-Road Heavy-Duty Diesel Vehicles Regulation	Consistent. This regulatory program applies to vehicle manufacturers, and not directly to land use development. However, the vehicles operated during Project construction and operations would benefit from and be consistent with this regulatory program in the form of reduced GHG emissions from the vehicle fleet.
Energy Use	
California Title 20 Standards Appliance Energy Efficiency Standards	Consistent. The Project would result in new land use development that would be outfitted with appliances that comply with CEC's Title 20 standards. In addition, MM-AQ-3 would require energy efficiencies to achieve LEED Silver certification.
California Title 24, Part 6 Standards Building Energy Efficiency Standards	Consistent. The Project will design and construct buildings in compliance with CEC's 2022 Title 24 standards. Title 24 requirements for non-residential projects include high-efficiency indoor and outdoor lighting requirements, thermostat and HVAC energy-efficiency requirements, and electrical metering requirements. MM-AQ-3 would require energy efficiencies to achieve LEED Silver certification.

Table 3.7-6. 2008 Scoping Plan and AB 32 Regulatory Program Consistency Summary

Regulatory Program	Project-Level Consistency Evaluation
California Title 24, Part 11 Standards Green Building Standards Code	Consistent. The development proposed by the Project would comply with the CALGreen Code. The CALGreen Code requires that plumbing fixtures not exceed the established flow rates outlined in Section 4.2.2 of the Code. The CALGreen standards also outline requirements for water-efficient landscaping design. Per MM-AQ-3 , the Project would include a plant palette emphasizing drought-tolerant plants and use of water-efficient irrigation techniques.
California Senate Bill X1-2 Renewables Portfolio Standard	Consistent. This regulatory program applies to investor-owned utilities, electric service providers, and community choice aggregators, and not directly to land use development. However, the Project would benefit from and be consistent with this regulatory because electricity would be purchased from SCE, which is required to procure 45% and 50% of retail sales from renewable energy resources by 2027 and 2030, respectively.
Water Supply, Treatment, and Distribution	
Senate Bill X7-7 Water Use Efficiency Program	Consistent This regulatory program is implemented through the California Department of Water Resources and urban water suppliers, not land use developers. The Project would be consistent with water conservation objectives through use of the latest water-efficiency technologies, including those relating to water-conserving plumbing fixtures, weather-sensitive irrigation controls, drought-tolerant landscaping palette. MM-AQ-3 requires additional water efficiencies.
Executive Order B-29-15	Consistent. Mandatory water reductions are implemented via EO B-29-15 and a regulatory framework developed by the State Water Resources Control Board. These regulatory programs apply to urban water suppliers, not land use developers. The Project would be consistent with water conservation objectives through use of the latest water-efficiency technologies, including those relating to water-conserving plumbing fixtures, weather-sensitive irrigation controls, and drought-tolerant landscaping palettes. MM-AQ-3 requires additional water efficiencies.
California Title 24, Part 11 Standards Green Building Standards Code	Consistent. The Project would be required to comply with the CALGreen Code. The use of water saving design elements (such as water-efficient toilets/urinals and faucets) will allow the Project to comply with the required 20% reduction in indoor potable water use. MM-AQ-3 requires additional water efficiencies.

Notes: CARB = California Air Resources Board; GHG = greenhouse gas; CEC = California Energy Commission; CALGreen = California Green Building Standards; SCE = Southern California Edison.

SCAG RTP/SCS – Connect SoCal Consistency

SCAG’s RTP/SCS, Connect SoCal (codified by AB 32), is a long-range transportation plan that is developed and updated by SCAG every 4 years. The RTP provides a vision for transportation investments throughout the region. The SCS integrates land use and transportation strategies that help to achieve GHG emissions reduction targets from the state’s 2035 and 2040 GHG reduction goals (SCAG 2020).

According to Connect SoCal, employment within Riverside County in 2019 is approximately 812,800 jobs, with an anticipated increase to approximately 1,063,800 jobs by 2045, a growth of approximately 251,000 jobs (SCAG 2020). The jobs created by the Proposed Project represent a nominal percentage

of the anticipated increase in jobs and therefore would not result in long-term operational employment growth that exceeds planned growth projections in the RTP/SCS or an air quality management plan, nor would it result in employment growth that would substantially add to traffic congestion. SCAG’s Connect SoCal (2020–2045 RTP/SCS) was adopted on September 3, 2020. The major goals of SCAG’s Connect SoCal are outlined in Table 3.7-7, along with the Proposed Project’s consistency with them. As shown below, the Proposed Project would comply with the policies set forth in Connect SoCal and the March JPA General Plan by reducing vehicle trips and VMT, increasing the use of alternative fuel vehicles, and improving energy efficiency. Regarding the RTP/SCS measure to leverage new transportation technologies, **MM-GHG-1** (Installation of EV Charging Stations) would be implemented as part of the Proposed Project to ensure consistency with Connect SoCal RTP/SCS.

Table 3.7-7. Connect SoCal RTP/SCS Consistency Summary

RTP/SCS Measure	Proposed Project Consistency
Encourage regional economic prosperity and global competitiveness.	Consistent. The Proposed Project would provide more local jobs to achieve a more favorable jobs/housing balance and providing annual economic contributions to the Riverside County region.
Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent. The Proposed Project would diversify the available access points for transporting goods to and from the region, which will strengthen the regional transportation network for goods movement.
Enhance the preservation, security, and resilience of the regional transportation system.	Consistent. The Proposed Project would diversify the available access points for transporting goods to and from the region, which enhances the resilience of the regional transportation system.
Increase person and goods movement and travel choices within the transportation system.	Consistent. The Proposed Project would enable the operations capacity of the March Inland Port Airport to be more fully utilized to meet regional demands for air cargo services within Southern California, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region, thereby improving goods movement.
Reduce greenhouse gas emissions and improve air quality.	Consistent. The Proposed Project would involve development of an employment-generating land use, similar to existing permitted land uses in the vicinity. Development of the Proposed Project would provide new job opportunities to residents in the region, improving the jobs/housing balance. The Proposed Project would reduce commutes to large urban centers such as Los Angeles or Orange County and reduce vehicle miles traveled (VMT) associated with longer commutes. Further, the Proposed Project will implement MM-AQ-3 through MM-AQ-6 and MM-GHG-1 , which are discrete mitigation measures aimed at reducing criteria air pollutant and GHG emissions.
Support healthy and equitable communities.	Consistent. The Proposed Project would provide local jobs to achieve a more favorable jobs/housing balance, reducing traffic congestion, pollution, and fossil fuel dependence.
Adapt to a changing climate and support an integrated regional development pattern and transportation network.	Consistent. The Proposed Project would provide local jobs to achieve a more favorable jobs/housing balance, reducing traffic congestion, pollution, and fossil fuel dependence.

Table 3.7-7. Connect SoCal RTP/SCS Consistency Summary

RTP/SCS Measure	Proposed Project Consistency
Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	<p>Consistent. Pursuant to MM-GHG-1, the Proposed Project would install the circuitry, capacity, and equipment for EV charging stations in accordance with Tier 2 of the 2022 CALGreen Code. MM-AQ-5 requires the provision of commute trip reduction measures.</p> <p>In addition, the Proposed Project would involve development of an employment-generating land use, similar to existing permitted land uses in the vicinity. Development of the Proposed Project would provide new job opportunities to residents in the region, improving the jobs/housing balance. The Proposed Project would reduce commutes to large urban centers such as Los Angeles or Orange County and reduce VMT associated with longer commutes.</p>
Encourage development of diverse housing types in areas that are supported by multiple transportation options.	<p>Not Applicable. The Proposed Project would not inhibit SCAG from encouraging development of diverse housing types.</p>
Promote conservation of natural and agricultural lands and restoration of habitats.	<p>Consistent. The project site is located adjacent to March ARB and other existing industrial developments and would not impact agricultural lands or natural habitat. Lands designated as Park/Recreation/Open Space in the March JPA planning area are primarily located west of Interstate 215 and north of March ARB, adjacent to Heacock Street. The Proposed Project would provide landscape improvements consistent with the March JPA Development Code on small islands in the on-site parking lots.</p>

Source: SCAG 2020.

Note: SCAG = Southern California Association of Governments; RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy; EV = electric vehicle; March ARB = March Air Reserve Base; March JPA = March Joint Powers Authority.

Conclusion

The project applicant would implement **MM-AQ-2** through **MM-AQ-6**, which would have co-benefits of reduction in GHG emissions (refer to Section 3.2.5 for full text of these measures). CalEEMod cannot accurately quantify these reductions in GHG emissions; therefore, no numeric emissions credit was taken in the analysis.

The Proposed Project would also implement **MM-GHG-1** (Installation of EV Charging Stations), which requires the circuitry, capacity, and equipment for EV charging stations in accordance with Tier 2 of the 2022 CALGreen Code and would have quantifiable results. Since the Proposed Project would provide 122 parking spaces, 2022 CALGreen would require 6 charging stations; Tier 2 would require 19 charging stations, resulting in a reduction of 146 MT CO_{2e} per year.

Technologies to reduce aircraft GHG emissions have not been fully developed, although research is ongoing; as such, although more than 90% of the Proposed Project’s GHG emissions would be from aircraft operations, there are no feasible mitigation measures to reduce these emissions.

In summary, the Proposed Project would comply with applicable reduction plans (CARB Scoping Plan and Connect SoCal RTP/SCS); therefore, impacts would be **less than significant with mitigation incorporated**.

County of Riverside CAP Consistency – Informational Discussion

The project site is in the jurisdiction of the March JPA within Riverside County. Although the County does not have direct authority over the Proposed Project, consistency with the County’s CAP is provided for informational purposes only.

Table 3.7-8 shows the Proposed Project’s consistency with applicable CAP measures to determine whether the Proposed Project would achieve the requisite 100 points per the County’s Screening Tables (County of Riverside 2019). As shown in Table 3.7-8, the Proposed Project would achieve the 100 points that determine consistency with the CAP. It should be noted that although the CAP requires on-site renewable energy production (including but not limited to solar photovoltaic panels), compliance with this requirement would not be feasible due to the project site’s vicinity to March ARB, because solar panels would interfere with aircraft navigation.

The County CAP currently evaluates and quantifies reductions out to 2030. The CAP states, “Through 2050, Riverside County would continue implementation of the Screening Tables. During this time, the reduction measures implemented through the Screening Tables would continue to reduce GHG emissions from new development. Additionally, it is assumed that the State measures would keep being updated and reinforced to further reduce emissions. With these assumptions, Riverside County’s emissions would decrease to a level below the reduction target by 2050” (County of Riverside 2019). Thus, compliance with the County’s CAP would serve to meet and support the reduction targets established in SB 32 and the CARB 2017 and CARB 2022 Scoping Plans (CARB 2017, 2022b).

Table 3.7-8. Riverside County CAP Consistency Summary

Feature	Description	Points
EE10.A.1: Insulation	Enhanced insulation (rigid wall insulation R-13, roof/attic R-38)	11
EE10.A.2: Windows	Greatly enhanced window insulation (0.28 or less U-factor, 0.22 or less SHGC)	7
EE10.A.3: Cool Roofs	Modest cool roof (CRRC rated 0.15 aged solar reflectance, 0.75 thermal emittance)	7
EE10.A.4: Air Infiltration	Blower door HERS-verified envelope leakage of equivalent	6
EE10.B.1: Heating/Cooling Distribution System	Modest duct insulation (R-6)	5
EE10.B.2: Space Heating/Cooling Equipment	Improved-efficiency heating, ventilation, and air conditioning (EER 14/78% AFUE or 8 HSPF)	4
EE10B.4: Water Heaters	High-efficiency water heater (0.72 Energy Factor)	10
EE10.B.5: Daylighting	All rooms daylighted	1
EE10.B.6: Artificial Lighting	High-efficiency lights (50% of in-unit fixtures are high efficiency)	7
W2.E.2: Toilets	Water efficient toilets/urinals (1.5 gallons per minute)	6
	Waterless urinals (commercial buildings having both waterless urinals and high-efficiency toilets would have a combined point value of 6 points)	0
W2.E.3: Faucets	Water-efficient faucets (1.28 gallons per minute)	2

Table 3.7-8. Riverside County CAP Consistency Summary

Feature	Description	Points
T3.A.5: Commute Trip Reduction	Employer based Commute Trip Reduction (CTR). Incentive Based CTR (1–8 points) Mandatory CTR Programs (5–20 points)	1
T4.B.1: Electric Vehicle Recharging	EV charging stations in garages and parking areas	152 ^a
Total Points Earned by Commercial/Industrial Project		219

Source: County of Riverside 2019; Appendix G.

Notes: SHGC = solar heat gain coefficient; CRRC = Cool Roof Rating Council; HERS = Home Energy Rating System; EER = energy efficiency ratio; AFUE = annual fuel utilization efficiency; HSPF = heating seasonal performance factor; EV = electric vehicle.

^a Under **MM-GHG-1**, the Proposed Project would include 19 EV charging stations. Per the Screening Tables, each station is 8 points (County of Riverside 2019).

GHG Quantification – Informational Discussion

In accordance with CEQA Guidelines 15183.5, the Proposed Project’s consistency with applicable regulatory plans and policies (AB 32, SB 32, and SB 375) to reduce GHG emissions is the sole basis for determining the significance of the Proposed Project’s GHG-related impacts on the environment. Nevertheless, in accordance with CEQA Guidelines Section 15064.4, GHG emissions resulting from construction and operation of the Proposed Project were quantitatively estimated and are provided for informational purposes.

Construction Phase

Because impacts from construction activities occur over a relatively short period, they contribute a relatively small portion of the overall lifetime project GHG emissions. The construction period represents approximately 3% of the operational lifetime of the Proposed Project (approximately 10 months of construction compared to the 30-year life of the Proposed Project) (SCAQMD 2009). In addition, GHG emission reduction measures for construction equipment are relatively limited. Therefore, a standard practice is to amortize construction emissions over the anticipated lifetime of a project, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. To amortize the emissions over the life of the Proposed Project, SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by the 30-year Proposed Project life, then adding that number to the annual operational-phase GHG emissions (SCAQMD 2009).

As such, construction emissions were amortized over a 30-year period and added to the annual operational-phase GHG emissions. The amortized construction emissions are presented in Table 3.7-9.

Table 3.7-9. Amortized Annual Proposed Project Construction Emissions

Year	Construction Equipment CO ₂ e Emissions (MT/yr)	On-Road Vehicle CO ₂ e Emissions (MT/yr)	Total CO ₂ e Emissions (MT/yr)
2024	349.40	285.76	635.16
2025	71.09	3.73	109.82

Table 3.7-9. Amortized Annual Proposed Project Construction Emissions

Year	Construction Equipment CO ₂ e Emissions (MT/yr)	On-Road Vehicle CO ₂ e Emissions (MT/yr)	Total CO ₂ e Emissions (MT/yr)
Total Construction Emissions	420.49	324.49	744.98
Amortized Construction Emissions (Metric Tons CO₂e)			24.83

Source: Appendix G.

Notes: CO₂e = carbon dioxide equivalent; MT/yr = metric tons per year.

Emissions shown represent a conservative estimate, as a 2023 construction start date and 2024 end date were assumed. Emissions decline over time because emissions factors for construction decrease as time passes and the analysis year increases, because of emissions regulations becoming more stringent.

Operation Phase

Operational emissions were calculated by determining the daily GHG emissions for peak and non-peak scenarios from the CalEEMod and AEDT outputs and multiplying the daily GHG emissions by 28 days (4 weeks) and 336 days (48 weeks) for peak and non-peak, respectively. The annual GHG emissions associated with operation of the Proposed Project are estimated to be 23,093.04 MT CO₂e per year, as summarized in Table 3.7-10.

Table 3.7-10. Proposed Project GHG Emissions (without Mitigation)

Emission Source	CO ₂ e Emissions (MT/yr) – Unmitigated
Annual construction-related emissions amortized over 30 years	24.83
Mobile source	5,736.78
Area source	3.67
Energy source	332.09
Water	103.72
Waste	52.95
Refrigerant leakage	30.42
Cargo handling equipment source	285.36
Aircraft	16,523.22
Proposed Project Total CO₂e Emissions (All Sources)	23,093.04

Source: Appendix G.

Notes: CO₂e = carbon dioxide equivalent; MT/yr = metric tons per year.

Operational emissions were modeled based on an opening year of 2024 and would decrease with a later opening year. See the Opening Year Emissions Memo, provided as Appendix B-2 to this EIR.

As stated previously, the qualitative evaluation of consistency with GHG reduction plans does not require quantification of Proposed Project GHG emissions. However, because implementation of **MM-AQ-3** through **MM-AQ-6** and **MM-GHG-1** is required to ensure that the Proposed Project would comply with the RTP/SCS, the mitigated GHG emissions are quantified, to the extent feasible methods are available, for disclosure purposes (Table 3.7-11). Note that only **MM-GHG-1** is quantifiable.

Table 3.7-11. Proposed Project GHG Emissions (with Mitigation)

Emission Source	CO ₂ e Emissions (MT/yr) – Mitigated
Annual construction-related emissions amortized over 30 years	24.83
Mobile source	5,736.78
Area source	3.67

Table 3.7-11. Proposed Project GHG Emissions (with Mitigation)

Emission Source	CO ₂ e Emissions (MT/yr) – Mitigated
Energy source	332.09
Water	103.72
Waste	52.95
Refrigerant leakage	30.42
Cargo handling equipment	285.36
Aircraft	16,523.22
<i>Reductions from Electric Vehicle Charging Stations</i>	-170
Project Total CO₂e Emissions (All Sources)	22,923.04

Source: Appendix G.

Notes: GHG = greenhouse gas; CO₂e = carbon dioxide equivalent; MT/yr = metric tons per year.

Operational emissions were modeled based on an opening year of 2024 and would decrease with a later opening year. See the Opening Year Emissions Memo, Appendix B-2.

3.7.5 Mitigation Measures

MM-GHG-1 Installation of EV Charging Stations. Prior to issuance of a building permit, March Joint Powers Authority shall ensure that the Proposed Project plans include the circuitry, capacity, and equipment for electric vehicle (EV) charging stations in accordance with Tier 2 of the 2022 CALGreen Code.

The following mitigation measures relating to air quality are also incorporated herein to reduce impacts related to GHG emissions; however, the resultant reductions in GHG emissions cannot accurately be quantified, so no numeric emissions credit was taken in the analysis for these mitigation measures. For the full text of **MM-AQ-2** through **MM-AQ-6**, please refer to Section 3.2.5.

- **MM-AQ-2 (Construction Requirements)**
- **MM-AQ-3 (Improved Energy Efficiency and Water Reduction)**
- **MM-AQ-4 (Truck Requirements)**
- **MM-AQ-5 (Commute Trip Reduction)**
- **MM-AQ-6 (Additional Air Quality Tenant Requirements)**

3.7.6 Level of Significance after Mitigation

The Proposed Project would result in a potentially significant impact relative to consistency with the Scoping Plan and the Connect SoCal RTP/SCS. Implementation of **MM-AQ-2** through **MM-AQ-6** and **MM-GHG-1** would make the Proposed Project consistent with the Scoping Plan and the RTP/SCS and would result in a **less-than-significant impact with mitigation incorporated**. Table 3.7-10 reflects the emissions accounting for implementation of **MM-GHG-1**. **MM-AQ-2** through **MM-AQ-6** would also be implemented and would result in GHG emissions reductions; however, as stated previously, CalEEMod cannot accurately quantify these reductions in GHG emissions, so no numeric emissions credit was taken in the analysis for **MM-AQ-2** through **MM-AQ-6**. The Proposed Project was found to be consistent with the Scoping Plan and the RTP/SCS; impacts would be **less than significant with mitigation incorporated**.

3.7.7 Cumulative Effects

GHG emissions inherently contribute to cumulative impacts; thus, any additional GHG emissions would result in a cumulative impact. Development of the project site would support the SCAG Connect SoCal by providing local jobs and through incorporation of energy efficiency, water conservation, and EV parking infrastructure; and would demonstrate consistency with the Scoping Plan. Given the Proposed Project's consistency with statewide, regional, and local plans adopted for the purpose of reducing GHG emissions, the Proposed Project's emissions and their effects on climate change would not be cumulatively considerable. The Proposed Project would implement **MM-AQ-2 through MM-AQ-6** and **MM-GHG-1** to further reduce the Proposed Project's GHG emissions. Therefore, the Proposed Project would result in a **less than cumulatively considerable impact with mitigation incorporated** related to GHG emissions.

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3.8 Hazards and Hazardous Materials

This section describes the existing hazardous materials within the vicinity of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site), identifies associated regulatory requirements, evaluates potential impacts related to the implementation of the Proposed Project, and specifies mitigation measures required for implementation of the Proposed Project. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Geotechnical Exploration, Proposed Gateway Aviation Center – Meridian Park D-1 SW of Heacock Street and Iris Avenue (Geotechnical Exploration), prepared by Leighton Consulting Inc. in October 2020 (Appendix H)
- Phase I Environmental Site Assessment (ESA) Meridian Park D-1/Gateway Aviation Center, prepared by Leighton Consulting Inc. in February 2024 (Appendix J-1)
- NETR Environmental Lien Report and Activity and Use Limitation Search Report, Heacock Street (Assessor's Parcel Number 294-170-010) (Appendix J-2)
- Wildlife Hazard Review, prepared by Mead & Hunt, September 23, 2022 (Appendix J-3)

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port (MIP) Airport under the jurisdiction of March Joint Powers Authority (JPA). The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.8.1 Existing Conditions

Hazardous Materials Setting

Existing Land Uses

The project site is relatively flat, draining gently in a southeastern direction. The majority of the project site is currently undeveloped and vacant land covered with small vegetative growth and seasonal weeds. The majority of the Off-Site Component is developed with the March ARB tarmac and service roads. Groundwater depths in borings drilled in the project site range from approximately 20 feet and 14.5 feet below ground surface (bgs) (Appendix H).

Some development is present on the project site and consists of one groundwater monitoring well (OU1MW14); a former (now vacant) concrete fire house; a paved taxiway and tarmac area associated with aviation uses; various paved areas located next to the existing taxiway; an airfield perimeter road along the northern side of the project site, and an asphalt road bordering the southern side of the project site leading to Heacock Street, as shown on Figure 2-1, Existing Site Setting, in Chapter 2 of this EIR. The Phase I ESA was completed for portions of Assessor's Parcel Numbers 294-170-010 and 294-170-006, which include the project site, both the Air Cargo Center Component and the Off-Site Component of the Proposed Project. The Phase I ESA identified the following

recognized environmental conditions (RECs), controlled RECs (CRECs), and business environmental risks (BERs) associated with the project site (summarized):

- **REC 1 – Proximity to Site 7.** Soil and soil vapor impacts are known in this area related to historical firefighting activities and burn pits. Contaminants of concern include volatile organic compounds (VOCs) and perfluorooctane sulfonate (PFOS).
- **REC 2 – Unknown Soil Stockpile.** A soil stockpile of unknown origin is located near the southwest corner of the project site.
- **CREC 1 – Location within Regulated Former March Air Force Base (AFB) and Activity and Use Limitations.** The project site is located within Parcel D-1 of the March AFB Superfund site and has activity and use limitations, which are summarized below under Activity and Use Limitations and discussed in Section 4.4 of the Phase I.
- **CREC 2 – Groundwater.** Groundwater beneath Site 7 has documented VOC contamination, including polyfluoroalkyl substances (PFAS) in groundwater beneath the project site. Activity and use limitations in place prevent groundwater use, which are summarized below under Activity and Use Limitations and discussed in Section 4.4 of the Phase I.
- **BER 1 – Future Remediation/Assessment Activities.** Future development activities may encounter various regulatory challenges which will require coordination, efforts and additional costs for planning and construction. Additionally, the project site and future development may be impacted by future activities needed to address existing environmental conditions near the project site. Remedial activities at the project site and coordination with relevant regulatory agencies are discussed further below.
- **BER 2 – Scattered Concrete Debris and Dumping.** Buried concrete was observed in various areas, which may result in disposal costs.
- **BER 3 – Stormwater.** Two stormwater swales observed through the project site may need to be relocated during future development.

The project site is surrounded by March ARB to the north and west, warehouse and air cargo facilities to the south, and the City of Moreno Valley and industrial land uses to the east. The nearest residential area is located approximately 0.5 miles to the east.

Historic Site Uses

The Phase I ESA indicates that the project site was used for agriculture in the 1930s, was vacant/unused in the 1940s, and remained vacant but became part of March AFB by at least 1953. By the late 1960s, evidence of firefighting training was visible in historical aerial photographs, along the eastern portion of the project site, becoming more pronounced by the late 1970s. The burn areas are in an area referred to as “Site 7” (further discussed below). The burn pits were used for crash rescue training and waste burning; reported burned wastes included oil, solvents, and jet fuel (Appendix J-1). The locations of Site 7 and the associated burn areas in relation to the project site are presented on Figure 2-5 in Chapter 2. The burn areas are not located within the project site. By the late 1980s, visual evidence of the former burn pits was mostly gone. By the mid-1990s, the present-day groundwater remediation equipment enclosure was installed in the northeastern corner. The soil vapor extraction (SVE) system was installed on the east side of Site 7 in 2011. From 2011 to present day, the site condition has been relatively unchanged. Adjoining warehouses were constructed to the east and south by 2006 (Appendix J-1).

In 1996, March AFB was redesignated as March ARB. Cleanup actions occurring on March ARB may be referred to as occurring on March AFB or March ARB. For the purposes of this section, historical reference to March AFB is in reference to operations prior to redesignation in 1996 or refers to the name of a regulatory case.

Site Investigations

The project site is located within the southeast corner of the former March AFB. The entire former March AFB was originally used to train pilots during World War I, and by 1938, it became the central location for west coast bombing and gunnery training. Given its purpose in national defense, there was a wide variety of operations that involved the use, storage, and disposal of hazardous materials and waste, such as fuel, solvents, and waste oil. In November 1991, March AFB was added to the National Priorities List under the Superfund program due to the contaminated groundwater (refer to Section 3.8.2, Relevant Plans, Policies, and Ordinances, under “Comprehensive Environmental Response, Compensation, and Liability Act,” for a description of the Superfund program). Numerous investigations of the March ARB (as both the former March AFB and present-day March ARB) have been conducted (Appendix J-1).

The Phase I ESA notes that the project site may be contaminated with chlorinated VOCs, particularly trichloroethylene (TCE), in the soil, soil gas, and groundwater. Soil contamination may also include metals, particularly lead, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, PFOS, and perfluorooctanoic acid (PFOA) (collectively referred to as PFAS). In February 2023, PFOS was detected at a concentration of 20.7 micrograms per kilogram ($\mu\text{g}/\text{kg}$) in soil sample location FT007P-20 from 0 to 0.5 feet bgs. The sampling location is on site, directly west of Site 7. Several step-out soil sample locations are proposed within the Site 7 boundaries to the north, south, and west of FT007P-20. Groundwater contamination also includes PFOS and PFOA. These contaminants are mainly associated with Site 7, which adjoins the project site to the east (Appendix J-1). An existing southeast access road crosses through Site 7 and will be expanded as part of the Project. The Phase I ESA notes that this part of Site 7 is less likely to be impacted from past uses. As discussed in Section 3.8.2 below, in April 2024, EPA released a final rule designating PFOS and PFOA as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (EPA 2024). EPA also released maximum contaminant levels (MCLs) for 6 types of PFAS (including PFOS and PFOA) in drinking water. As noted above, activity and use limitations are in place that prevent the use of groundwater at the site. Activity and use limitations are discussed further below.

A review of the State Water Resources Control Board (SWRCB) GeoTracker database indicates that groundwater contamination at the project site has historically been addressed as part of a broader investigation of groundwater throughout March ARB (SWRCB 2024a). When March AFB (now March ARB) was added to the National Priorities List, the areas of investigation were divided into three operable units (OUs). Site 7 was included in OU1. In June 2013, groundwater investigation of several sites within OU1, including Site 7, was consolidated under Site 49 (CG049) within the newly created OU5. The site investigation records pertaining to hazardous materials investigations of groundwater in OU1 and Site CG049/OU5 are summarized in Table 3.8-1.

In addition to the broader investigations of groundwater within March ARB, three Military Cleanup Cases specifically address contamination in the Site 7 subarea adjacent to the project site.¹ These cases are also summarized in Table 3.8-1. The investigation of groundwater contamination under these Military Cleanup Cases was also consolidated under Site CG049/OU5 in June 2013. Soil and soil vapor contamination within Site 7 is still being investigated under the site-specific Military Cleanup Cases (Appendix J-1).

¹ Military Cleanup Cases are located on former or existing military bases. Military Cleanup Cases are primarily regulated under the federal Resource Conservation and Recovery Act of 1976/Comprehensive Environmental Response, Compensation, & Liability Act standards by the nine Regional Water Quality Control Boards (RWQCBs). For the project site, the local RWQCB is the Santa Ana RWQCB.

Off-Site Hazardous Materials Releases

Numerous hazardous materials investigation cases are located on March ARB. One hazardous materials release site and three Military Cleanup Cases were identified as having the potential to contribute to hazardous materials contamination on the project site due to the nature of the contamination and upgradient location (Appendix J-1). These cases are summarized in Table 3.8-2. Site 18 was removed from OU1 in 2013 and was not included in Site CG049/OU5. The Military Cleanup Cases related to Sites 5 and 15 are being investigated as part of the broader investigation and remediation of Site CG049/OU5 (SWRCB 2024b).

Table 3.8-1. Hazardous Materials Investigation Cases

Area of Investigation	Site Name	GeoTracker Global ID	Cleanup Oversight Agencies	Status	Hazardous Materials Contamination
OU1	USAF, Former March AFB – OU-1 – OU-1 Sites Off-Base Groundwater Plume	DOD100278700	Santa Ana RWQCB DTSC EPA	Open – Remediation as of 7/1/2010	Groundwater contaminants are benzene, VOCs, PCE, TCE. As of June 2013, the groundwater investigations were transferred to Site CG049/OU5.
OU1	USAF, March ARB – OU-1 Sites Groundwater Plume	DOD100319400	Santa Ana RWQCB DTSC EPA	Open – Remediation as of 12/6/2006	Groundwater contaminants are VOCs, TCE. As of June 2013, the groundwater investigations were transferred to Site CG049/OU5.
Site CG049/OU5	March ARB OU-5, Site CG049 Basewide Groundwater	T10000005654	Santa Ana RWQCB DTSC EPA	Open – Remediation as of 2/13/2014	Groundwater contaminants are VOCs, PFOS, PFOA, PCE, TCE.
Site 7	Site 7A Petroleum	T10000004745	Santa Ana RWQCB	Open – Remediation as of 1/11/2012	Benzene in soil and soil vapor.
	March AFB – USAF, former March AFB – OU-1 – IRP Site FT007 Fire Protection Training Area No. 2	DOD100277300	Santa Ana RWQCB DTSC EPA	Open – Remediation as of 10/27/2010	Soil and groundwater contaminants are diesel, dioxins/furans, gasoline, lead and other metals, VOCs, PFOS, PFOA, stoddard solvent/mineral spirits/distillates, toluene, TCE, waste oil/motor/hydraulic/lubricating, xylene. As of June 2013, the groundwater investigations were transferred to Site CG049/OU5.
	March AFB – March ARB Site 403, East of Base, Investigation for Poly and Per-Fluorinated Substances Release	T10000013831	Santa Ana RWQCB	Open – Remediation as of 12/4/2019	Soil and groundwater contaminants are PFOS and PFOA As of June 2013, the groundwater investigations were transferred to Site CG049/OU5.

Sources: Appendix J-1; SWRCB 2024a.

Notes: OU1 = Operable Unit 1; USAF = U.S. Air Force; AFB = Air Force Base; RWQCB = Regional Water Quality Control Board; DTSC = Department of Toxic Substances Control; EPA = U.S. Environmental Protection Agency; VOCs = volatile organic compounds; PCE = tetrachloroethylene; TCE = trichloroethylene; Site CG049 = Consolidated Groundwater Site 49; OU5 = Operable Unit 5; ARB = Air Reserve Base; PFOS = perfluorooctane sulfonate; PFOA = perfluorooctanoic acid.

Table 3.8-2. Hazardous Materials Investigation Cases Identified Off Site

Site Name	Regulatory Database	Location	Hazardous Materials Contamination	Proximity to the Project Site
March AFB Building 962	CHMIRS Notify 65	Bldg. 962, March AFB	The CHMIRS listing indicates a release of 500 to 1,000 gallons of TCE in 1997. The release is further reported to have an average concentration of 19.6 parts per billion, indicating that this was a release of water containing TCE, versus pure TCE.	This listing is plotted just north and upgradient of the project site.
March ARB – Site 18 Engine Test Cell	Military Cleanup Site (Global ID DOD100321400)	Site 18 Engine Test Cell	Prior to installation of an oil/water separator in 1976, spills of oil and fuels drained to a nearby ditch and dry well. Soil vapor and groundwater remediation was initiated in 1997. As of 1/9/2018, verification monitoring was ongoing. Free product was detected in two on-site wells on 11/15/2018.	The site is located approximately 1,400 feet northwest and upgradient of the project site.
March ARB – OU1 – Site 15 Fire Protection Training Area No. 3	Military Cleanup Site (Global ID DOD100282100)	Site 15	Approximately 6,000 gallons per year of contaminated jet fuel were burned in training exercises since the firefighter training facility was constructed. Soil contaminated with petroleum hydrocarbons and PAHs was excavated in 1995. The groundwater investigation was transferred to OU1, and then to Site CG049/OU5. With the removal of contaminated soils, this case was closed in 1996.	This site adjoins the project site to the north and is upgradient. Groundwater contamination is being addressed under Site CG049/OU5.
March ARB – OU1 Site 5 Landfill No. 3	Military Cleanup Site (Global ID DOD100289900)	Site 5, Landfill No. 3	A landfill was operated on the site from the 1940s to 1960. Landfill wastes consisted primarily of sanitary waste and construction rubble. Site investigations found no unacceptable risk to groundwater quality and the site was closed in 1995. The groundwater investigation was transferred to OU1, and then to Site CG049/OU5.	This site adjoins the project site to the north and is upgradient. Groundwater contamination is being addressed under Site CG049/OU5.

Sources: Appendix J-1 (Phase I ESA); SWRCB 2024b.

Notes: AFB = Air Force Base; CHMIRS = California Hazardous Material Incident Report System; Notify 65 = list compiled under Proposition 65 “The Safe Drinking Water and Toxic Enforcement Act of 1986”; TCE = trichloroethylene; ARB = Air Reserve Base; OU1 = Operable Unit 1; OU5 = Operable Unit 5; PAH = polycyclic aromatic hydrocarbon; Site CG049 = Consolidated Groundwater Site 49.

Remediation Activities on the Project Site

CG049/OU5 Remediation

All groundwater on March ARB and the former March AFB was combined into a single operable unit, OU5, consisting of a single site, CG049. The Record of Decision (ROD) for CG049/OU5 was completed and approved in 2019, which “decoupled” groundwater (OU5/CG049) from other remediation media (soil, soil vapor), thereby managing it as a single unit (Air Force Civil Engineer Center 2019). As discussed above, groundwater beneath Site 7, which adjoins the project site to the east, is included in the CG049/OU5 operational area and is referred to in the ROD as “CG049-07.” The ROD discusses remediation of groundwater only within Site 7. The following methods were selected in the ROD to address groundwater contamination within CG049/OU5:

- **Monitored Natural Attenuation.** This remedy requires monitoring site wells to evaluate the effectiveness of natural attenuation to meet the applicable or relevant and appropriate requirements over time.
- **Boundary Plume Control.** This remedy achieves hydraulic plume control at the March ARB boundary through operation of an upgraded enhanced groundwater extraction and treatment system (EGETS), referred to as EGETS2.
- **Active Restoration.** This remedy includes targeted treatment (likely enhanced bioremediation) for areas with high contaminant concentrations. The intent is to decrease cleanup time by actively destroying groundwater contaminants and minimizing contaminant migration. Active remediation of hot spots will be evaluated during the remedial design phase.
- **Institutional Controls.** The timeframe for achieving groundwater applicable or relevant and appropriate requirements at CG049 exceeds 100 years. Thus, the selected remedy requires long-term administrative management and land-use restrictions to ensure protection of human health and the environment. Institutional controls will be developed and implemented and will require continuous enforcement by the landowner, as well as state and local regulatory agencies.

These cleanup actions will be implemented under the ROD.

The ROD states that CG049-07 (contaminated groundwater beneath Site 7) would most benefit from boundary plume control to prevent further migration of contaminants; monitored natural attenuation, because limited evidence of reductive dichlorination has been observed (i.e., natural degradation of contaminants); and institutional controls, which are described in the subsection “Activity and Use Limitations” (Air Force Civil Engineer Center 2019).

The 2018–2019 OU5 groundwater monitoring report (AECOM 2020a) indicates that TCE, benzene, and cis-1,2-dichloroethylene remain in groundwater beneath Site 7 greater than the established cleanup goals. The monitoring well located within the project site, OU1MW14, did not have detectable concentrations of any contaminants of concern during the 2018–2019 groundwater sampling year (AECOM 2020a). OU1MW14 is located within the project site. The Proposed Project would include expansion of the existing access roadway to the south and a right-turn pocket at Heacock Street, and improvements to the northern access roadway. The existing southern access roadway that will be expanded is located within Site 7, and active treatment systems and monitoring are present along Heacock Street. Monitoring wells in the area along the access roadway (EX06, 5MW04, and 5MW10) did not have detected concentrations of contaminants of concern above the established cleanup goals in the 2018–2019 groundwater reporting year (AECOM 2020a). The northern access roadway does not cross Site 7, nor are monitoring wells present within the roadway.

The Site FT007 Semiannual Groundwater Monitoring Report (CH2M 2020) found that groundwater beneath Site 7 is impacted with benzene and TCE at concentrations of 290 micrograms per liter ($\mu\text{g}/\text{L}$) and $7.7 \mu\text{g}/\text{L}$, respectively. These concentrations were detected in monitoring well FT7MW03, which is approximately 350 feet east of the development area and 300 feet north of the access road that crosses through Site 7.

The Phase I ESA concluded that VOCs, including TCE, exist in soil gas beneath Site 7 at concentrations reported to exceed acceptable health risk levels for vapor intrusion. The SVE system within Site 7 provides interim vapor remediation and is likely to be expanded in the near future. The location of Site 7 soil gas impacts in relation to the project site is considered a Vapor Encroachment Condition.

Previous Site 7 Remediation

Remediation of petroleum hydrocarbons and benzene occurred within the southeast corner of Site 7 using SVE beginning in 2013. The SVE system operated from July 2013 until November 2013. Closure of the SVE system was granted in 2014 because contaminants of concern were below regulatory screening levels.

A second SVE system is still operational along the western side of Heacock Street. SVE system operation and monitoring, as well as groundwater monitoring, are still ongoing as part of a Santa Ana Regional Water Quality Control Board (RWQCB) case (March AFB – US Air Force, former March AFB – OU-1 – IRP Site FT007 Fire Protection Training Area No. 2) (Table 3.8-1). An SVE rebound study was conducted in April 2020 (AECOM 2020b). The results indicated that constituents of concern were greater than cleanup levels in four of nine extraction wells, and one of six monitoring wells. In April 2020, the SVE system was scheduled to continue to operate for 12 months. Following necessary maintenance and repairs that delayed system operation, monitoring was scheduled to continue through 2021 and 2022 (DAF 2021).

Activity and Use Limitations

A copy of the Environmental Lien and Activity and Use Limitation Report was provided with the Phase I ESA (Appendices J-1 and J-2).² Parcel D-1 of the former March AFB consists of approximately 164 acres of land (“Property”), which includes the Air Cargo Component but does not include the Off-Site Component of the project site. The Environmental Restrictive Covenants were agreed upon between the Grantor (United States of America) and the Grantee (March JPA). Environmental Restrictive Covenants applicable to this hazards assessment are summarized as follows:

- Groundwater shall not be extracted from within the boundary of the Property except for monitoring purposes.
- The “Site 7” portion of the Property is restricted from use for the following purposes: residential, schools for persons under 18 years of age, day care, or a hospital for human care.
- Activities at the Property cannot result in the movement of soils from Site 7, as described in Exhibit C of the Environmental Restrictive Covenant.
- The Grantee or its successor shall notify EPA [U.S. Environmental Protection Agency] Region IX and State of California (“State”³) at least 30 days prior to construction of any building at Site 7.

² An activity and use limitation applied to sites with hazardous materials contamination describes restrictions on site uses and activities based on the level of cleanup achieved and the remaining risk.

³ As defined in the deed restriction, “state” is defined as the State of California and its respective officials, agents, employees, contractors, and subcontractors. For the Site 7 cleanup, the state is represented by the California Department of Toxic Substances Control and the Santa Ana RWQCB.

- Any buildings at Site 7 shall be constructed with engineering controls (e.g., vapor barriers, specialized fan systems, or other related engineered controls) to mitigate the potential for vapors to migrate from the subsurface into the building.
- Grantee shall not disturb, interfere, obstruct, or impede any wells and treatment facilities or systems used in the environmental remediation and restoration of the Property.
- Grantee shall not disrupt required remedial investigation, response actions, or oversight activities, should any be required on the Property.
- No activities shall be done that cause the injection of water or other fluids without a prior written plan approved by others.
- Grantee shall not conduct activities that would limit access to any equipment or systems associated with groundwater monitoring.
- Asbestos containing materials may be present in improvements, such as buildings, facilities, equipment and pipelines above and below the ground. Grantee will assume all responsibility and liability for any activity causing or leading to contact of any kind whatsoever with asbestos on the property.
- Grantee is solely responsible for managing lead-based paints (LBP), including LBP in soils, in accordance with all applicable federal, state, and local laws and regulations.

The full Quitclaim Deed is provided in Appendix J-2.

As stated in the OU5 ROD (Air Force Civil Engineer Center 2019), the Restrictive Covenants are enforceable by the state, U.S. Department of the Air Force (DAF), and EPA. The property owner or DAF may make notifications of breaches of the deed restrictions to the state and/or EPA, who will evaluate enforcement, as necessary. Additionally, modifications and/or terminations of the deed restrictions would require EPA and state approval; any actions that may disrupt the effectiveness of the institutional controls required must be first authorized by EPA and the state.

3.8.2 Relevant Plans, Policies, and Ordinances

Hazardous materials, including hazardous substances and wastes, are regulated by many federal and state laws. Statutes govern the generation, treatment, storage, and disposal of hazardous materials, substances, and waste, as well as air and water quality, human health, land use, and the investigation and mitigation of waste releases.

Federal

The following are the primary federal laws regulating hazards and hazardous wastes/materials.

Federal Toxic Substances Control Act and Resource Conservation and Recovery Act

Within the U.S. Code (USC), the Federal Toxic Substances Control Act of 1976 (15 USC 2601 et seq.) and the Resource Conservation and Recovery Act (RCRA) of 1976 (42 USC 6901 et seq.) established a program administered by EPA for regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Amendments (PL 98-616), which affirmed and extended the “cradle-to-grave” system of regulating hazardous wastes. The use of certain techniques for disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste Amendments. Under the authority of RCRA, the regulatory framework for managing hazardous waste, including requirements for entities that generate, store, transport, treat, and dispose of hazardous waste, is found in the Code of Federal Regulations (CFR), Title 40, Parts 260–282.

Hazardous and Solid Waste Amendments

In 1984 the Solid Waste Disposal Act (as amended by RCRA in 1976) was amended to focus on waste minimization and phasing out land disposal of hazardous waste as well as corrective actions for releases.

Pollution Prevention Act

The Pollution Prevention Act was established in 42 USC Section 13101 et seq. (1990) and focused on reducing the amount of pollution through changes in production, operation, and raw material use. The act focuses on industry, government, and public attention to pollution prevention, specifically through source reduction instead of pollution control. Practices of pollution prevention include increased efficiency in use of water, energy, and other natural resources, and protection of resources through conservation.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 USC 9601 et seq.), commonly known as “Superfund,” was enacted by Congress on December 11, 1980. CERCLA provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health and/or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also enables the revision of the National Oil and Hazardous Substances Pollution Contingency Plan, which provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants.

Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA in 1986, making multiple changes to CERCLA. These changes included emphasis on the importance of permanent remedies in hazardous waste site cleanup, required Superfund actions to include requirements found in other federal and state environmental laws and regulations, established new enforcement and settlement tools, increased state involvement in the Superfund program, increased focus on human health problems posed by hazardous waste sites, encouraged citizen participation, and increase the trust fund size. SARA also revised the Hazard Ranking System that evaluates eligibility of sites to be included on the National Priorities List. In April 2024, EPA designated 2 PFAS, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS), as hazardous substances under CERCLA (EPA 2024). On April 10, 2024, EPA released its Final Rule on Drinking Water Standards for PFAS.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under USC Title 49. The California Highway Patrol and the California Department of Transportation (Caltrans) have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies. These agencies also administer permitting for hazardous materials transportation.

Oil Pollution Prevention Regulations

Oil Pollution Prevention regulations at 40 CFR Part 112 require the preparation of a spill prevention, control, and countermeasure plan if oil is stored in excess of 1,320 gallons in aboveground storage (or if there is buried storage with capacity in excess 42,000 gallons). Spill prevention, control, and countermeasure regulations place restrictions on the management of petroleum materials and therefore have some bearing on hazardous materials management.

National Emission Standard for Asbestos

The regulations at 40 CFR Part 63 established the National Emission Standards for Hazardous Air Pollutants and names asbestos-containing material as one of these materials. Asbestos-containing material use, removal, and disposal are regulated by EPA under this law. In addition, notification of friable asbestos-containing material removal prior to a proposed demolition project is required by this law.

Community Right-to-Know Act

The Community Right to Know Act (40 CFR Parts 350–372) established four types of reporting obligations for facilities storing or managing specified chemicals: emergency planning, emergency release notification, hazardous chemical storage reporting requirements, and toxic chemical release inventory. EPA maintains a database, termed the Toxic Release Inventory, which includes information on reportable releases to the environment.

Regional Screening Levels

EPA provides regional screening levels (RSLs) for chemical contaminants to provide comparison values for residential and commercial/industrial exposures to soil, air, and tap water (drinking water). RSLs are a recommended, but not mandatory, approach to risk assessment for response actions at CERCLA sites. RSLs are available on the EPA website and provide a screening-level calculation tool to assist risk assessors, remediation project managers, and others involved with risk assessment and decision making. RSLs are also used when a site is initially investigated to determine if potentially significant levels of contamination are present to warrant further investigation. In California, the Department of Toxic Substances Control (DTSC) Human and Ecological Response Office (HERO) incorporated the EPA RSLs into the HERO human health risk assessment. HERO created Human Health Risk Assessment Note 3, which incorporates HERO recommendations and DTSC-modified screening levels based on the EPA RSLs. The DTSC-modified screening level should be used in conjunction with the EPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities.

U.S. Department of Labor, Occupational Safety, and Health Administration

CFR Title 29, Part 1926 – Safety and Health Regulations for Construction

These standards require employee training; personal protective equipment; safety equipment; and written procedures, programs, and plans for ensuring worker safety when working with hazardous materials or in hazardous work environments during construction activities, including renovations and demolition projects and the handling, storage, and use of explosives. These standards also provide rules for the removal and disposal of asbestos, lead, lead-based paint, and other lead materials. Although intended primarily to protect worker health and safety, these requirements also guide general facility safety. These regulations also require the preparation of an engineering survey prior to demolition.

CFR Title 29, Part 1910 – Occupational Safety and Health Standards

Under these regulations, facilities that use, store, manufacture, handle, process, or move hazardous materials are required to conduct employee safety training, inventory safety equipment relevant to potential hazards, have knowledge of safety equipment use, prepare an illness prevention program, provide hazardous substance exposure warnings, prepare an emergency response plan, and prepare a fire prevention plan.

U.S. Department of Transportation

CFR Title 49, Part 172(C) – Shipping Papers

The U.S. Department of Transportation established standards for the transport of hazardous materials and hazardous waste. The standards include requirements for labeling, packaging, and shipping hazardous materials and hazardous wastes, as well as training requirements for personnel completing shipping papers and manifests.

Federal Aviation Administration

14 CFR 77.9, Construction or Alteration Requiring Notice

The Federal Aviation Administration (FAA) requires that any structure that is located in proximity to an airport or that meets other criteria per 14 CFR, Section 77.9, file Form FAA 7460-1 with the FAA (refer to FAA 2020a through 2020d). Because the project site is located adjacent to and partially on the March ARB, the project applicant will be required to file Form FAA 7460-1, Notice of Proposed Construction or Alteration, with FAA.

FAA Advisory Circular 150/5200-33C, Hazardous Wildlife Attractants on or near Airports

FAA Advisory Circular 150/5200-33C provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports. The advisory circular also discusses airport development projects, including airport construction, expansion, and renovation, affecting aircraft movement near hazardous wildlife attractants. “Hazardous wildlife” is defined as a species of wildlife (birds, mammals, reptiles), including feral and domesticated animals, not under control, that are associated with aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a strike hazard. Included within the advisory circular are minimum separation criteria for land-use practices that attract hazardous wildlife to the vicinity of airports. Separation distances are based on flight patterns, altitude at which most strikes happen, and National Transportation Safety Board recommendations. Land use practices discussed within the advisory circular associated with wildlife hazards directly applicable to the Proposed Project include the placement and design of new stormwater management facilities, which must drain within 48 hours after a storm event.

Department of Defense

Air Installations Compatibility Use Zones

The Department of Defense has developed the Air Installations Compatibility Use Zones (AICUZ) program to ensure that development is compatible with aviation operations in areas on and adjacent to military airfields (Air Force Civil Engineer Center 2023). The AICUZ land use recommendations are based on safety considerations and on land use compatibility with exposure to aircraft noise. Recommended compatible land uses are derived from data on noise contours (noise zones) and safety zones (clear zones and accident potential zones).

The 2018 March ARB AICUZ Study is an update of the AICUZ study dated 2005. The update is a reevaluation of aircraft noise and accident potential related to DAF flying operations and is designed to aid in the development of local planning mechanisms to protect public safety and health and preserve the operational capabilities of March ARB. The update also provides noise contours based on the community noise equivalent level (CNEL) metric and uses a planning noise contour. The project site is located within the 60 A-weighted decibel (dBA) and 70 dBA Noise Contour Level (March ARB 2018, Figure 4-2). Industrial and commercial land uses are considered compatible for noise contours less than 80 dBA CNEL (March ARB 2018). Some commercial land uses come with limitations, which generally include a required noise level reduction (NLR), as defined in Appendix A, Table A-2, of the AICUZ Study (March ARB 2018), as further discussed in Section 3.11, Noise, of this EIR.

Air Force Installation Restoration Program

The Air Force Installation Restoration Program is designed to identify, investigate, and cleanup contamination associated with past Air Force activities at Air Force installations, government-owned facilities, off-site locations where contamination may have migrated, third-party sites, and formerly Air-Force-owned sites. Restoration activities under this program are conducted in accordance with either RCRA or the Federal Superfund Program (both of which are discussed earlier in this subsection).

State

In addition to federal laws and statutes, the State of California has its own set of statutes and regulations governing hazards and hazardous materials.

California Health and Safety Code

In California, the handling and storage of hazardous materials is regulated by Division 20, Chapter 6.95, of the California Health and Safety Code (Section 25500 et seq.). Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a hazardous materials business plan (HMBP). HMBPs contain basic information about the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of on the site.

Chapter 6.95 of the California Health and Safety Code establishes minimum statewide standards for HMBPs. Under Section 25507, each business must prepare an HMBP if that business uses, handles, or stores a hazardous material (including hazardous waste) or an extremely hazardous material in disclosable quantities equal to or greater than the following:

- 500 pounds of a solid substance
- 55 gallons of a liquid
- 200 cubic feet of compressed gas
- A hazardous compressed gas in any amount (highly toxic with a Threshold Limit Value of 10 parts per million or less)
- Extremely hazardous substances in threshold planning quantities as defined in 40 CFR Part 355

In addition, in the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by California code, facilities are also required to prepare a risk management plan consistent with the CalARP Program under Title 19 of the California Code of Regulations, Section 2735.1 et seq. The risk management

plan provides information about the potential impact zone of a worst-case release, and requires programs designed to minimize the probability of a release and to mitigate potential impacts.

California Office of Emergency Services

To protect the public health and safety and the environment, the California Office of Emergency Services is responsible for establishing and managing statewide standards for business and area plans relating to the handling and release or threatened release of hazardous materials. Basic information on hazardous materials handled, used, stored, or disposed of (including location, type, quantity, and health risks) needs to be available to firefighters and public safety officers. Regulations are included in business plans to prevent or mitigate damage to the health and safety of persons and the environment from the release or threatened release of these materials into the workplace and environment. These regulations are covered under Chapter 6.95 of Division 20 of the California Health and Safety Code Article 1, Business and Area Plans (Sections 25500 to 25519), and Article 2, Hazardous Materials Management (Sections 25531 to 25543.3).

California Occupational Safety and Health Administration

Under the California Occupational Safety and Health Act of 1973, the California Occupational Safety and Health Administration (Cal/OSHA) is responsible for ensuring safe and healthful working conditions for California workers. Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in 8 CCR, Division 1. Cal/OSHA hazardous substances regulations include requirements for safety training, availability of safety equipment, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA also enforces hazard communication program regulations, which contain training and information requirements, including procedures for identifying and labeling hazardous substances. The hazard communication program also requires that material safety data sheets be available to employees and that employee information and training programs be documented.

In 8 CCR, Division 1, Chapter 4, Subchapter 4, Construction Safety Orders, construction safety orders are listed and include rules for demolition, excavation, explosives work, working around fumes and vapors, pile driving, vehicle and traffic control, crane operation, scaffolding, fall protection, and fire protection and prevention, among others.

Asbestos

The Cal/OSHA Asbestos and Carcinogen Unit enforces asbestos standards in construction, shipyards, and general industry. This includes identification and removal requirements of asbestos in buildings, as well as health and safety requirements of employees performing work under the Asbestos-in-Construction regulations (8 CCR 1529). Only a Cal/OSHA Certified Asbestos Consultant can provide asbestos consulting (as defined by Business and Professions Code Section 7180 et seq. and triggered by the same size and concentration thresholds as for registered contractors). These services include building inspection, abatement project design, contract administration, supervision of site surveillance technicians, sample collection, preparation of asbestos management plans, and clearance air monitoring.

Lead-Based Paint

The California Department of Public Health enforces lead laws and regulations related to the prevention of lead poisoning in children, prevention of lead poisoning in occupational workers, accreditation and training for construction-related activities, lead exposure screening and reporting, disclosures, and limitations on the amount

of lead found in products. Accredited lead specialists are required to find and abate lead hazards in construction projects and to perform lead-related construction work in an effective and safe manner. Lead protections in construction activities are described in 8 CCR, Section 1532.1.

Hearing Conservation and Personal Protective Equipment

A hearing conservation program is required to be administered by employers for employees who are exposed to noise above an 8-hour time-weighted average (TWA) of 85 dBA (8 CCR, Section 5097). Additionally, employers must make hearing protectors available to all employees exposed to the 8-hour TWA of 85 dBA or greater at no cost to the employee.

California Hazardous Waste Control Act

DTSC is responsible for the enforcement of the Hazardous Waste Control Act (California Health and Safety Code Section 25100 et seq.), which creates the framework under which hazardous wastes are managed in California. The law provides for the development of a state hazardous waste program that administers and implements the provisions of the federal RCRA cradle-to-grave waste management system in California. It also provides for the designation of California-only hazardous waste and development of standards that are equal to or, in some cases, more stringent than federal requirements. Although the Hazardous Waste Control Act is generally more stringent than RCRA, until EPA approves the California Hazardous Waste Control Program (which is charged with regulating the generation, treatment, storage, and disposal of hazardous waste), both the federal and state laws apply in California, and hazardous waste reporting and regulation are enforced through DTSC. The Hazardous Waste Control Act lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

According to 22 CCR 66261.1 et seq., substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated, or that is being stored prior to proper disposal.

Toxic substances may cause short-term or long-lasting health impacts, ranging from temporary impacts to permanent disability or death. For example, toxic substances can cause eye or skin irritation, disorientation, headache, nausea, allergic reactions, acute poisoning, chronic illness, or other adverse health effects if human exposure exceeds certain levels (the level depends on the substance involved). Carcinogens (substances known to cause cancer) are a special class of toxic substances. Examples of toxic substances include most heavy metals, pesticides, and benzene (a carcinogenic component of gasoline). Ignitable substances (e.g., gasoline, hexane, and natural gas) are hazardous because of their flammable properties. Corrosive substances (e.g., strong acids and bases such as sulfuric [battery] acid or lye) are chemically active and can damage other materials or cause severe burns upon contact. Reactive substances (e.g., explosives, pressurized canisters, and pure sodium metal, which reacts violently with water) may cause explosions or generate gases or fumes.

California Accidental Release Prevention Program

Similar to the Community Right to Know Act, the CalARP Program (19 CCR 2735.1 et seq.) regulates facilities that use or store regulated substances, such as toxic or flammable chemicals, in quantities that exceed established thresholds. The overall purpose of the CalARP Program is to prevent accidental releases of regulated substances and reduce the severity of releases that may occur. The CalARP Program meets the requirements of the EPA Risk Management Program, which was established pursuant to the Clean Air Act Amendments.

California Unified Program for Management of Hazardous Waste and Materials

Under the California EPA (CalEPA), DTSC and the Enforcement and Emergency Response Program administer the technical implementation of California's Unified Program, which consolidates the administration, permit, inspection, and enforcement activities of several environmental and emergency management programs at the local level (DTSC 2022). Certified Unified Program Agencies implement the hazardous waste and materials standards. This program was established under the amendments to the California Health and Safety Code made by Senate Bill (SB) 1082 in 1994. The programs that make up the Unified Program are as follows:

- Aboveground Petroleum Storage Act Program
- Area Plans for Hazardous Materials Emergencies
- CalARP Program
- HMBPs and Inventories
- Hazardous Material Management Plans and Hazardous Material Inventory Statements
- Hazardous Waste Generator and On-Site Hazardous Waste Treatment (Tiered Permitting) Program
- Underground Storage Tank Program

The Certified Unified Program Agency for the project site is the Riverside County Department of Environmental Health (DEH).

Human Health Risk Assessment Note 3 – DTSC-Modified Screening Levels

Human Health Risk Assessment Note 3 presents recommended screening levels (derived from the EPA RSLs using DTSC-modified exposure and toxicity factors) for constituents in soil, tap water, and ambient air. The DTSC-modified screening level should be used in conjunction with the EPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities.

Environmental Screening Levels

Environmental Screening Levels (ESLs) provide conservative screening levels for more than 100 chemicals found at sites with contaminated soil and groundwater. They are intended to help expedite the identification and evaluation of potential environmental concerns at contaminated sites. ESLs are prepared by the staff of the San Francisco Bay RWQCB. ESLs are not intended to establish policy or regulation, but they can be used as a conservative screening level for sites with contamination. Other agencies in California may elect to use ESLs; in general, ESLs could be used at any site in California, provided all stakeholders agree. In Dudek's recent experience, regulatory agencies throughout the state are using ESLs more frequently as regulatory cleanup levels. ESLs are not generally used at sites where the contamination is solely related to a leaking underground storage tank; those sites are instead subject to the Low-Threat Underground Storage Tank Closure Policy.

California Department of Transportation/California Highway Patrol

Under 13 CCR, Division 2, Chapter 6, California regulates the transportation of hazardous waste originating or passing through the state. The California Highway Patrol and Caltrans have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies. The California Highway Patrol enforces materials and hazardous waste labeling and packing regulations that prevent leakages and spills of material in transit and provides detailed information to cleanup crews in the event of an incident. The California Highway Patrol is responsible for vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation. The California Highway Patrol conducts regular inspections of licensed transporters to ensure regulatory compliance. Caltrans has emergency chemical spill identification teams at locations throughout the state. Hazardous waste must be regularly removed from generating sites by licensed hazardous waste transporters. Transported materials must be accompanied by hazardous waste manifests.

California Code of Regulations

Most state and federal regulations and requirements that apply to generators of hazardous waste are identified in 22 CCR, Division 4.5. Title 22 contains the detailed compliance requirements for hazardous waste generators, transporters, treatment, storage, and disposal facilities. As California is a fully authorized state pursuant to RCRA, most RCRA regulations, such as those contained in 40 CFR Part 260 et seq., have been duplicated and integrated into Title 22. However, since DTSC regulates hazardous waste more stringently than EPA, the integration of federal and state hazardous waste regulations that make up Title 22 do not contain as many exemptions or exclusions as RCRA. As with the California Health and Safety Code, Title 22 also regulates a wider range of waste types and waste management activities than do RCRA regulations in 40 CFR Part 260. To aid the regulated community, California compiled the hazardous materials, waste, and toxics-related regulations contained in CCR Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27, into one consolidated CCR Title 26, Toxics. However, the California hazardous waste regulations are still commonly referred to as “Title 22.”

California Government Code Section 51014.6

Section 51014.6 of the California Government Code states the following:

- (a) Effective January 1, 1987, no person, other than the pipeline operator, shall do any of the following with respect to any pipeline easement:
 - (1) Build, erect, or create a structure or improvement within the pipeline easement or permit the building, erection, or creation thereof.
 - (2) Build, erect, or create a structure, fence, wall, or obstruction adjacent to any pipeline easement which would prevent complete and unimpaired surface access to the easement, or permit the building, erection, or creation thereof.
- (b) No shrubbery or shielding shall be installed on the pipeline easement which would impair aerial observation of the pipeline easement. This subdivision does not prevent the revegetation of any landscape disturbed within a pipeline easement as a result of constructing the pipeline and does not prevent the holder of the underlying fee interest or the holder’s tenant from planting and harvesting seasonal agricultural crops on a pipeline easement.
- (c) This section does not prohibit a pipeline operator from performing any necessary activities within a pipeline easement, including, but not limited to, the construction, replacement, relocation, repair, or operation of the pipeline.

As stated in the Office of the State Fire Marshal, Pipeline Safety Division Information Sheet (CAL FIRE 2015), it is the position of the State Fire Marshal that nothing may encroach into or upon the pipeline easement that would impede the pipeline operator from complete and unobstructed surface access along the pipeline right-of-way, nor may there be any obstructions that would shield the pipeline right-of-way from observation. In the interest of public safety and the protection of the environment, it is imperative that the pipeline operator visually assesses the conditions along the easement to ensure the integrity of the pipeline.

It is the responsibility of the pipeline operator to ensure that they have unimpeded surface access and to be able to physically observe all portions of their pipeline rights-of-way. In cases where this is not possible, the pipeline operator must inform the State Fire Marshal. The State Fire Marshal will, in collaboration with the pipeline operator, resolve the issue.

California State Aeronautics Act

The purpose of the California State Aeronautics Act, California Public Utilities Code Section 21001 et seq., administered by the Caltrans Division of Aeronautics, is “to protect the public interest in aeronautics and aeronautical progress.” Per California Public Utilities Code Sections 21670–21679.5, the State Aeronautics Act directs formation of Airport Land Use Commissions (ALUCs). ALUCs are charged with preparing Airport Land Use Compatibility Plans (ALUCPs), pursuant to California Public Utilities Code Sections 21675 and 21674.7. Consistent with these provisions, the Riverside County ALUC has created an ALUCP for each airport under its jurisdiction. The March ARB/Inland Port Airport ALUCP is discussed in greater detail under applicable local regulations.

California Communities Environmental Health Screening Tool

The California Communities Environmental Health Screening Tool (CalEnviroScreen) is a mapping tool developed by the Office of Environmental Health Hazards Assessment to help identify low-income census tracts in California that are disproportionately burdened by and vulnerable to multiple sources of pollution. CalEnviroScreen uses environmental, health, and socioeconomic information based on data sets available from federal and state government sources to produce scores for every census tract in the state. Scores are generated using 20 statewide indicators in 4 categories: exposures, environmental effects, sensitive populations, and socioeconomic factors. Exposures and environmental effects characterize the pollution burden that a community faces, and sensitive populations and socioeconomic factors define population characteristics. Use of CalEnviroScreen mapping and data for the purpose of California Environmental Quality Act (CEQA) analysis is recommended by the California Governor’s Office of Planning and Research, but this has also been a point of debate. Nonetheless, the data and mapping in CalEnviroScreen offer a statewide, georeferenced database combining socioeconomic and environmental factors relevant to environmental justice analysis, which provides useful information for CEQA review in combination with normal project- and site-specific investigations.

Pursuant to SB 535 and based on CalEnviroScreen Version 4.0, CalEPA updated the Designation of Disadvantaged Communities in May 2022. Version 4.0 was released in October 2021. CalEPA formally designates four categories of geographic areas as disadvantaged: (1) census tracts with the highest 25% of overall scores in CalEnviroScreen 4.0; (2) census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps, but receiving the highest 5% of CalEnviroScreen 4.0 cumulative pollution burden scores; (3) census tracts identified in 2017 as disadvantaged communities, regardless of their revised scores; and (4) land controlled by federally recognized tribes.

The project site is within Census Tract 6065046700, which includes all of March ARB, the March JPA Planning Area, and three blocks of the City of Moreno Valley, and has a score of 98 on CalEnviroScreen. The census tract immediately adjacent to the project site (6065042507) has a CalEnviroScreen score of 78. The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Local

In addition to federal and state laws and statutes, local agencies and jurisdictions have their own set of statutes and regulations governing hazards and hazardous materials.

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) regulates air quality in Riverside County. SCAQMD Rule 1403 governs work practice requirements for asbestos in all renovation and demolition activities, including subsurface piping (transite pipe). Rule 1403 includes requirements for asbestos surveying, notifications, asbestos-containing material removal procedures, schedules, handling and cleanup procedures, storage, disposal, and landfill requirements for waste materials. All operators are also required to maintain records and use appropriate labels, signs, and markings. Rule 1403 incorporates the federal asbestos requirements found in the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 61, Subpart M. EPA has delegated SCAQMD as the authority to enforce the federal asbestos National Emission Standards for Hazardous Air Pollutants.

SCAQMD Rule 1166 sets requirements to control the emission of VOCs from excavating, grading, handling, and treating VOC-contaminated soils. Under this rule, soil with a VOC concentration equal to or greater than 50 parts per million is considered "VOC contaminated soil" and must be handled in accordance with Rule 1166. Requirements under this rule include a VOC Contaminated Soil Management Plan, notifications, recordkeeping, monitoring, and handling procedures.

SCAQMD Rule 1466 sets requirements for control of particulate emissions from soils with toxic air contaminants. The provisions in Rule 1466 include ambient coarse particulate matter (PM₁₀) monitoring; dust control measures; and notification, signage, and recordkeeping requirements.

Riverside County Department of Environmental Health

The Riverside County DEH is responsible for oversight of seven hazardous materials programs in Riverside County: Aboveground Petroleum Storage Tanks, Accidental Release Prevention Program, HMBPs, Emergency Response, Underground Storage Tanks, Waste Generator, and Waste Treatment Programs. The Riverside County DEH is duly authorized to conduct permitting, inspections, and enforcement actions associated with these state programs.

The Riverside County DEH is also responsible for plan review prior to construction of certain projects. Although DEH only requires plan review for underground storage tank installation at new facilities, some cities and local jurisdictions require permit clearance from DEH, meaning proof that plans are not required, prior to issuing permits and licenses. March JPA permit applications require Riverside County DEH review for new construction to evaluate potential items that may fall under Riverside County DEH jurisdiction. Additionally, the Riverside County DEH works with local planning departments during commercial property development to evaluate items such as on-site

wastewater treatment, underground storage tanks, the Aboveground Petroleum Storage Act, environmental assessment reviews, and hazardous materials disclosure.

March JPA General Plan

The Safety/Risk Management Element of the March JPA General Plan (March JPA 1999) includes policies related to safety risks. The following policies from the March JPA General Plan apply to the Proposed Project. Consistency with these policies is discussed in Section 3.10, Land Use and Planning, of this EIR.

Safety and Risk Management Element

Goal 5: Reduce the potential for hazardous material exposure or contamination in the Planning Area.

Policy 5.1: Comply with the enforcement of disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify such materials at the site, and to notify the appropriate County, State and/or Federal agencies in the event of a violation.

Policy 5.3: Ensure the storage, use and transportation of any hazardous material complies with the standards set forth within the errata sheets published for each substance.

Environmental Justice Element

In April 2024, March JPA adopted an Environmental Justice Element for its General Plan (March JPA 2024). The Environmental Justice Element incorporates the environmental justice policies of the County of Riverside Healthy Communities Element pursuant to California Government Code Section 65301(a). The County of Riverside Board of Supervisors adopted environmental justice policies by Resolution 2021-182 on September 21, 2021. The goal of the Environmental Justice Element is to ensure the consideration of environmental justice policies to improve public health and the environment within the March JPA Planning Area. Policies and new land use development proposed within the March JPA Planning Area will be evaluated for promoting all environmental justice policies. The land use entitlement process provides a key opportunity to address environmental justice policies through the creation of safe, healthy, and environmentally sustainable communities. The following policy would be relevant to the Proposed Project:

Policy HC 16.5: Evaluate the compatibility of unhealthy and polluting land uses being located near sensitive receptors including possible impacts on ingress, egress, and access routes. Similarly, encourage sensitive receptors, such as housing, schools, hospitals, clinics, and childcare facilities to be located away from uses that pose potential hazards to human health and safety.

Airport Land Use Compatibility Plan and Land Use Restrictions

March ARB AICUZ

In February 2018, March ARB released an update of the March ARB AICUZ Study dated 2005. This update was initiated because of the beddown of new aircraft,⁴ operational changes, and the introduction of new flight tracks. It reevaluated aircraft noise and accident potential related to DAF flying operations and is designed to aid in the development of local planning mechanisms to protect public safety and health and preserve the operational capabilities of March ARB. The AICUZ program is a means to protect public health, safety, and general welfare in areas surrounding March ARB while seeking development compatible with the defense flying mission.

March ARB/Inland Port Airport ALUCP

The March ARB/Inland Port Airport ALUCP was prepared for and adopted by the Riverside County ALUC on November 13, 2014. The purpose of the March ARB/ Inland Port Airport ALUCP is to promote compatibility between the March ARB/Inland Port Airport and the land uses that surround the joint-use airport, to the extent such areas are not already devoted to incompatible uses. The March ARB/Inland Port Airport ALUCP regulates future development of new residential dwellings, commercial structures, and other noise- or risk-sensitive uses within the Airport Influence Area based on factors enumerated in the ALUCP, including noise, overflight, safety, and airspace protection. The Riverside County ALUCP Policy Document, which includes County-wide policies, provides criteria for determining the land use compatibility of a project that is located within 2 miles of an airport runway (County of Riverside 2004). Policy 4.1.5, Noise Exposure for Other Land Uses, of the Riverside County ALUCP identifies the compatibility of different land uses with different noise levels at CNEL 50 dBA and higher. The March ARB/Inland Port Airport ALUCP provides March ARB/Inland Port-specific policies. As set forth in Policy MA.2.3(a), the CNEL considered normally acceptable for new residential land uses in the vicinity of March ARB/Inland Port Airport is 65 dBA (County of Riverside 2014). Table 3.8-3 provides the noise compatibility criteria for March ARB/Inland Port Airport.

Table 3.8-3. Riverside County Airport Land Use Compatibility Criteria: Noise

Land Use Category	Noise Level (dBA CNEL)				
	50-55	55-60	60-65	65-70	70-75
Residential					
Single-family, nursing homes, mobile homes	++	+	+	--	--
Multi-family, apartment, condominiums	++	+	+	--	--
Public					
Schools, libraries, hospitals	+	o	-	--	--
Churches, auditoriums, concert halls	+	o	o	-	--
Transportation, parking, cemeteries	++	++	++	+	o
Commercial and Industrial					
Offices, retail trade	++	+	o	o	-
Service commercial, wholesale trade, warehousing, light industrial	++	++	+	o	o
General manufacturing, utilities, extractive industry	++	++	++	+	+

⁴ *Beddown* is a military term that references the execution of a base action, such as establishing a unit on Air Force real property for longer than 1year (U.S. Air Force 2020)

Table 3.8-3. Riverside County Airport Land Use Compatibility Criteria: Noise

Land Use Category	Noise Level (dBA CNEL)				
	50-55	55-60	60-65	65-70	70-75
Agricultural and Recreational					
Cropland	++	++	++	++	+
Livestock breeding	++	+	o	o	-
Parks, playgrounds, zoos	++	+	+	o	-
Golf courses, riding stables, water recreation	++	++	+	o	o
Outdoor spectator sports	++	+	+	o	-
Amphitheaters	+	o	-	--	--

Source: Adapted from County of Riverside 2004, Table 2B, County of Riverside 2014 MA.2.3(a).

Notes: dBA = A-weighted decibels; CNEL = community noise equivalent level.

Land Use Acceptability (Compatibility)

Interpretation/Comments

- ++ Clearly acceptable The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.
- + Normally acceptable Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.
- o Marginally acceptable The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. The land use is acceptable on the conditions that outdoor activities are minimal and construction features which provide sufficient noise attenuation are used (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged.
- Normally unacceptable Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses which have conventionally constructed structures and/or involve outdoor activities which would be disrupted by noise should generally be avoided.
- Clearly unacceptable Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided unless strong overriding factors prevail and it should be prohibited if outdoor activities are involved.

March JPA Development Code

March JPA Lighting Standards

Section 9.08.100 (Lighting) of the March JPA Development Code contains the development regulations pertaining to the construction and operation of outdoor lighting associated with nonresidential uses, parking areas, and overhead roof lighting. Section 9.08.190 (Street Lighting) of the March JPA Development Code contains the development regulations pertaining to the construction and operation of streetlights. Section 9.10.110 (Light and Glare) of the March JPA Development Code provides development regulations pertaining to light and glare, prohibiting any operation, activity, sign, or lighting fixture that creates illumination that exceeds 0.5 foot-candles maintained on any adjacent property, whether the illumination is direct or indirect light from the source, and requiring all lighting to be designed to project downward so as to not create glare on adjacent properties (March JPA 2016).

Hazardous Materials Management

Section 9.08.090 (Hazardous Materials Management) of the March JPA Development Code sets hazardous material management requirements for operations within the March JPA Planning Area. Requirements are summarized as follows (March JPA 2016):

- Commercial and industrial facilities that receive, use, store, transport, or dispose of hazardous wastes/restricted use pesticides greater than 500 pounds at any one time shall have access to sewer and freeways and shall not store materials within 2,000 feet of the nearest planned residential use area.
- A list of hazardous materials to be used at each commercial or industrial site shall be provided to the Fire Department. The list shall include quantity, storage location, and how it will react to fire.
- Buildings that store hazardous materials shall be equipped with signage or placards appropriately identifying the hazardous materials stored inside.
- Discharge of hazardous wastes is prohibited within the March JPA Planning Area.
- A hazardous material and waste management plan shall be prepared by commercial or industrial facilities within the March JPA Planning Area. The plan will outline best available technology for production, use, and storage, and will outline source reduction, treatment, handling, transportation, disposal, emergency response, and employee training methods. The plan will be subject to approval by the March JPA Planning Director and review by the Police Department.

Airport Rules and Regulations

The MIP Airport Authority prepared and revised the Airport Rules and Regulations (MIPAA 2022) for MIP Airport (airport call letters KRIV), which establish procedures for airport operations, emergency response, security, operation of aircraft, fire safety, noise management, and ground transportation. The Airport Rules and Regulations also include guidelines for stormwater pollution prevention and best management practices (BMPs). Procedures include, but are not limited to, the following:

- Response to fuel and hazardous material spills
- Guidelines for handling of hazardous and explosive materials and hazardous wastes
- Guidelines for hazardous material and waste BMPs, based on the California Stormwater BMP Handbook

3.8.3 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's impacts related to hazards and hazardous materials are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, where applicable, the March JPA CEQA Guidelines (March JPA 2022). According to these CEQA Guidelines, a significant impact related to hazards and hazardous materials would occur if a project would:

- 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.

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as result, would 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, result in a safety hazard or excessive noise for people residing or working in the project area.
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

As discussed in the Initial Study prepared for the Proposed Project (Appendix A-2), the Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school, resulting in no impact. In addition, it was determined in the Initial Study that the Proposed Project would result in a less-than-significant impact related to impairing the implementation of, or physically interfering with, an adopted emergency response plan or emergency evacuation plan, as well as the exposure of people or structures to significant risk of loss, injury, or death involving wildland fires. Accordingly, these issues are not analyzed in this section of the EIR. For details regarding these thresholds, please refer to the Initial Study (provided in Appendix A-2 of this EIR) and Section 4.2, Effects Found Not to Be Significant, of this EIR.

For the purposes of the analysis in this EIR, a significant hazard and hazardous materials impact would occur if the Proposed Project would:

HAZ-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

HAZ-2 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.

HAZ-3 Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as result, would create a significant hazard to the public or the environment.

HAZ-4 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 or excessive noise for people residing or working in the project area.

3.8.4 Impacts Analysis

Threshold HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less-Than-Significant Impact with Mitigation Incorporated.

Construction

The Proposed Project would involve construction of a 180,800-square-foot cargo building, as well as excavation, grading, and paving of the project site. The Off-Site Component of the Proposed Project would involve construction and improvement of runways and utilities. A variety of hazardous materials would be transported, stored, used, and disposed of during construction activities. These include fuels for equipment and vehicles, new and used motor oils, cleaning solvents, paints, and storage containers and applicators containing such materials. These materials would be transported, used, and disposed of in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Additionally, all construction waste, including trash, litter, garbage, solid waste, petroleum products, and any other potentially hazardous materials, would be removed and transported to an appropriately permitted waste facility for treatment, storage, or disposal. Use of these materials during construction for their intended purpose would not pose a significant risk to the public or the environment. Consistent with federal, state, and local requirements, transport, removal, and disposal of hazardous materials would be conducted by a permitted and licensed service provider. Any handling, transport, use, or disposal would comply with all applicable federal, state, and local regulations (as listed in Section 3.8.2, Relevant Plans, Policies, and Ordinances). Should transportation of hazardous materials be required on March ARB property (i.e., the Off-Site Component of the Proposed Project), handling and transportation would also occur in accordance with March ARB and March JPA rules and regulations, in addition to those rules and regulations listed above. If reportable quantities of hazardous materials or oil products, as set forth by the EPA pursuant to CERCLA Section 102, are stored on site during construction, these would be managed in accordance with federal (Spill Prevention, Control, and Countermeasures) and state (Certified Unified Program Agency and HMBP) requirements.

The Proposed Project requires expansion and modification of the existing southern access roadway, which currently crosses Site 7, and the project site overlaps the CG049/OU5 portion of the March AFB Superfund Site, which encompasses the entire groundwater unit beneath the current March ARB. Site 7 has documented soil, soil gas, and groundwater contamination, and is currently under a deed restriction and Environmental Restrictive Covenants. As discussed in 3.8.1, Existing Conditions, the groundwater contamination documented within CG049/OU5 does not extend into project site (including the northern and southern access roadways) but does extend into the right-of-way of Heacock Street. Additionally, multiple monitoring and treatment wells are located along the western side of Heacock Street. The Proposed Project would include construction of a 225-foot-long right-turn pocket into the existing southern access roadway along the southbound side of Heacock Street and installation of a traffic signal at the existing access roadway (Figure 2-5). Construction of the right-turn pocket and traffic signal and expansion of the access roadway would occur within the boundaries of Site 7, the CG049/OU5 contamination plume and treatment area. As discussed in Section 3.8.1, Existing Conditions, Environmental Restrictive Covenants do not allow movement of soils from Site 7. Additionally, because the southern access roadway and right-turn pocket of

Heacock Street are within the boundaries of contaminated sites (Site 7 and CG049/OU5), construction has the potential to result in significant impacts through the transport, use, or disposal of hazardous materials, and mitigation measures are required. To reduce potentially significant impacts associated with the accidental release of chemicals from the project site during construction, a hazardous materials contingency plan (HMCP) would be implemented in accordance with **Mitigation Measure (MM) HAZ-1** (Hazardous Materials Contingency Plan) (refer to Section 3.8.5, Mitigation Measures, for full text of mitigation measures relating to hazards and hazardous materials). Because Site 7 is under Environmental Restrictive Covenants, the HMCP shall be submitted to EPA Region IX and the state for review/approval prior to the start of construction.

During Proposed Project construction, excavation depths are anticipated to reach a maximum of 8 to 10 feet bgs, and shallow groundwater is approximately 14 to 20 feet bgs. Although not anticipated to occur, groundwater may be encountered during excavation activities. Although the groundwater contamination plume does not lie directly beneath the project site, construction dewatering could extract nearby contaminated groundwater, and could interfere with nearby remediation systems (such as the Site 7 SVE system) due to drawdown effects. In addition, construction of project site access could impact existing groundwater wells. In accordance with **MM-HAZ-2** (Stop Work, Groundwater Management), groundwater wells would not be disturbed during construction. Should groundwater be encountered during excavation and/or construction activities, impacts could be significant. Therefore, **MM-HAZ-2** would be implemented, requiring that work activities be stopped and that the Santa Ana RWQCB be contacted to determine appropriate procedures to either manage contaminated groundwater or alter construction plans to avoid further contact with contaminated groundwater. Implementation of this mitigation measure would prevent a significant hazard to the public or environment. Implementation of **MM-HAZ-2** would also prevent disruption of environmental monitoring and remediation activities being conducted during Proposed Project construction. With implementation of **MM-HAZ-1** and **MM-HAZ-2**, potential hazards and hazardous materials impacts associated with Proposed Project construction would be **less than significant with mitigation incorporated**.

Operation

Once operational, the Proposed Project is anticipated to average 17 flights per day. Air cargo would arrive and be off-loaded into the cargo building for further distribution via trucks. Truck cargo would arrive and be off-loaded into the cargo building for air transportation. Washing activities would occur via a mobile wash rack. Wash water would be discharged through a grease trap to the sanitary sewer. Aircraft fueling would occur on the project site; fuel would be trucked from the existing March JPA fuel farm located off site.

Hazardous materials used, transported, and stored on site would be handled in accordance with federal, state, and local regulations. If quantities of hazardous materials are stored at greater than applicable reportable quantities, the appropriate plans, permits, and reporting would be completed, such as Spill Prevention, Control, and Countermeasure Plans for oil storage in accordance with EPA requirements; HMBPs for hazardous material storage in accordance with CalEPA and Riverside County DEH requirements; and hazardous waste storage, disposal, and reporting in accordance with RCRA requirements. March JPA requires submittal of these plans prior to issuance of operational permits and/or occupancy permits, further reducing the potential for a hazard due to use, transportation, or disposal of hazardous materials.

Aircraft fueling would occur on the project site. March JPA, the project operator, and/or the project applicant would be responsible for implementation of appropriate permits, safety programs, training, and other applicable measures for fueling and fuel storage, pursuant to FAA, EPA, and other applicable regulations. Fueling and other on-site operations would be subject to the MIP Airport Rules and Regulations (MIPAA 2022), which include BMPs for protection of stormwater. Washing operations would be conducted indoors and would be subject to the requirements of the project-specific Water Quality Management Plan (Appendix K-2), as discussed in Section 3.9, Hydrology and Water Quality.

Transport and handling of, and exposure to, contaminated soil would not occur during the operational phase of the Proposed Project because the project site would be graded and paved, and portions of the site would be covered by the cargo building. A 12-foot-high wall would be installed along the eastern side of the project site, restricting access to Site 7 and the remaining contaminated media. Access roadways would be provided for truck and vehicular traffic so that remaining contaminated areas are not disturbed during routine operations. With adherence to federal, state, and local requirements, as described above, hazardous materials impacts during operations would be **less than significant**.

Threshold HAZ-2: Would the project 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?

Less-Than-Significant Impact with Mitigation Incorporated.

Construction

Construction of the southern access roadway and Heacock Street right-turn pocket would require excavation of Site 7 soils, which could release hazardous materials into the environment. To reduce potentially significant impacts, **MM-HAZ-1** requires that an HMCP be in place during excavation, grading, and other earth-movement activities to provide protective procedures for excavation, handling, stockpiling, transporting, testing, segregating, and disposing of contaminated soils as required by federal, state, and local laws and regulations. In addition, because Site 7 is under Environmental Restrictive Covenants, the HMCP would be provided to EPA Region IX and the state for review and approval. The HMCP includes health and safety measures, monitoring, and reporting procedures in accordance with Cal/OSHA and SCAQMD Rules 1403, 1466, and 1166, which would provide protection from potentially contaminated soil vapor during construction activities (refer to Section 3.8.2). Implementation of **MM-HAZ-2** would minimize and/or prevent upset or accident conditions with regards to contaminated groundwater.

Demolition of the existing site structures, which may include facilities, equipment, and aboveground and underground pipelines, would be required during site redevelopment. As discussed in Section 3.8.1, improvements on the project site may include asbestos-containing materials (such as the fire house, facilities, equipment, and pipelines) and lead-based paint. Demolition and disposal of these materials without proper abatement and protective procedures could create an upset condition causing a release of hazardous materials. SCAQMD Rule 1403 (refer to Section 3.8.2) requires the survey and proper abatement of asbestos-containing materials, as well as worker protections and air monitoring. Adherence to these regulations would reduce the risk of upset and accident conditions with regard to asbestos. State regulations require protections for workers against lead exposure and disposal of materials containing hazardous amounts of lead. Therefore, with adherence to applicable state and local laws and regulations, potential impacts from asbestos-containing materials and lead-based paint would be **less than significant**.

With implementation of **MM-HAZ-1** and **MM-HAZ-2**, impacts would be **less than significant with mitigation incorporated**.

Operation

Aircraft fueling would be subject to the MIP Airport Authority Rules and Regulations, which include BMPs for protection of stormwater (refer to Section 3.9, Hydrology and Water Quality). These protections include spill prevention and response procedures and BMPs for fueling that would reduce the likelihood for an upset or accident condition involving the release of fuels to soil and groundwater and include stormwater conveyances. Fueling would occur in designated paved areas by trained personnel and with spill protection measures in place. Specific spill protection measures (BMPs) would include placement of spill response kits adjacent to refueling locations (or equivalent measure as approved by the March JPA); kits would include sufficient materials to contain the likely release volume during fueling. Therefore, potential impacts during operations would be **less than significant**.

Threshold HAZ-3: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as result, would it create a significant hazard to the public or the environment?

Less-Than-Significant Impact with Mitigation Incorporated.

Construction

California Government Code Section 65962.5 combines several regulatory lists of sites that have the potential to pose a hazard related to known hazardous materials and substances. These sites include Hazardous Waste and Substances sites from DTSC (state and federal cleanup sites); leaking underground storage tank sites from SWRCB; solid waste disposal sites identified by SWRCB with constituents above hazardous waste levels outside the waste management area; active Cease and Desist Orders and Cleanup and Abatement Orders sites from SWRCB; and hazardous waste facilities subject to corrective actions pursuant to Section 25187.5 of the Health and Safety Code.

As discussed in Section 3.8.1, the project site is located partially within the March AFB Superfund site, which was added to the National Priorities List in 1991. The Proposed Project would involve expanding the existing southern access roadway, which overlaps Site 7, and the project site overlaps CGO49/OU5 portion of the March AFB Superfund site, which are both undergoing active remediation, as summarized in Table 3.8-1. Other hazardous materials release sites were identified as being off site in the Phase I ESA (Appendix J-1) and as summarized in Table 3.8-2. Site 7 includes contaminated soil, soil vapor, and groundwater. Construction of the Proposed Project could result in potentially significant impacts. Implementation of **MM-HAZ-1** and **MM-HAZ-2** would provide protections during excavation and construction to reduce the risk of exposure to contaminated soil, soil vapor, and groundwater to ensure the health and safety of construction workers and future occupants of the industrial uses on the site. **MM-HAZ-2** also includes protective measures for on-site monitoring wells. Notifications to EPA Region IX and the state would be completed as part of the permitting process, and the HMCP would be provided to EPA Region IX and the state for review/approval. This review would provide further oversight of proposed construction activities.

Construction of the Proposed Project would result in paving and/or building construction over the entirety of the project site, and paving and utility installation in the Off-Site Component, as shown in Figure 2-5, in Chapter 2. A 12-foot-high wall would be installed along the eastern side of the project site, restricting access to Site 7 and the remaining contaminated media. With regard to the existing off-site SVE system, no construction is proposed in the active treatment areas. In addition to avoiding significant impacts to the SVE system, protection of the SVE system would be ensured through implementation of **MM-HAZ-2** (which includes protection of existing groundwater monitoring and extraction wells) and **MM-HAZ-1** (which requires the Proposed Project's HMCP to be reviewed by EPA Region IX and the state for permitting and review). Implementation of **MM-HAZ-1** and **MM-HAZ-2** would allow remediation to continue to reduce contaminant levels adjacent to the project site, thereby further reducing less-than-significant impacts.

With these protections and with implementation of **MM-HAZ-1** and **MM-HAZ-2**, impacts during construction would be **less than significant with mitigation incorporated**.

Operation

Construction of the Proposed Project would result in paving and/or building construction over the entirety of the project site, and paving and utility installation in the Off-Site Component, as shown in Figure 2-5. A 12-foot-high wall would be installed along the eastern side of the project site, restricting access to Site 7 and the remaining contaminated media. The operational portion of the project site would not have exposed soil or groundwater; therefore, impacts would be **less than significant**.

Threshold HAZ-4: 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 or excessive noise for people residing or working in the project area?

Less-Than-Significant Impact with Mitigation Incorporated.

The project site is located adjacent to and partially on the March ARB and is included in the March ARB/Inland Port Airport ALUCP. As depicted in the March ARB/Inland Port Airport ALUCP, the project site is located within the B2 compatibility zone (County of Riverside 2014). Zone B2 is considered a high noise impact zone, covering areas within or near the 65 dBA CNEL contour, and beneath or adjacent to the runway. However, it is not within an Accident Potential Zone. Uses prohibited within Zone B2 include children's schools, daycare centers, libraries, hospitals, congregate care facilities, hotels/motels, places of assembly, buildings with more than three aboveground habitable floors, noise-sensitive outdoor nonresidential uses, critical community infrastructure facilities, and hazards to flight.

Other development conditions applicable to areas within Zone B2 include the following (County of Riverside 2014):

- Structures are to be located a maximum distance from the runway.
- Sound attenuation is required as necessary to meet the interior noise level criteria. For office buildings, the sound-attenuation features must be sufficient enough to reduce the exterior aviation-related noise level to no more than CNEL 45 dBA. An acoustical study shall be required for any development where the aviation-related noise exposure is greater than 20 dB [decibels] above the interior standard (i.e., 65 dBA).

- Airspace review is required for objects greater than 35 feet tall.
- Aboveground bulk storage (greater than 6,000 gallons) of hazardous materials is discouraged.
- March ARB must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include microwave transmission in conjunction with a cellular tower, radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers and other similar electromagnetic radiation emissions.

Construction

Construction employees on the project site would be exposed to noise levels within the 65 dBA CNEL noise level contour, in addition to noise due to construction equipment. As required by Cal/OSHA, a hearing conservation program and readily available hearing protection for employees are required for exposure to noise above 85 dBA over an 8-hour TWA. The TWA would be calculated as outlined in 8 CCR, Section 5097. Therefore, with adherence to state regulations, potential hazard impacts due to noise during construction would be **less than significant**.

To avoid and/or minimize potential safety hazards for people working within Zone B2, the March ARB/Inland Port Airport ALUCP requires an airspace review for objects greater than 35 feet; however, the height criterion is for general guidance and airspace review requirements are determined on a site-specific basis in accordance with 14 CFR, Part 77 (County of Riverside 2014). The proposed cargo building would have a maximum height of 45 feet, as shown in Figure 2-6, Cargo Building Elevations; therefore, airspace review in accordance with 14 CFR, Part 77, is required prior to publication of the Draft EIR. Also, pursuant to Table 9.05.040-8, Industrial Site Development Minimum Standards, of the March JPA Development Code, maximum building height for development in the Aviation (A) district is 45 feet.

FAA issued Determinations of No Hazard (FAA 2020a, 2020b, 2020c, and 2020d) letters for the proposed cargo building corners on September 3, 2020. Because the FAA plan review did not identify any safety hazards that would interfere with aircraft operations, **no impacts** for potential safety hazards to people working within the vicinity of a public airport would occur.

Additionally, ALUC review is required for the Proposed Project in accordance with Section 1.5.3(a)(9) of Chapter 2, Countywide Policies, of the Riverside County ALUCP. As previously stated, airspace review by the ALUC is generally required for objects in Zone B2 that are greater than 35 feet tall; in this case, ALUC review is required for any development on the project site, based on its location within the ALUCP area. Although the ALUCP notes that a height of 35 feet is for general guidance and that taller objects may be accepted if determined not to be obstructions (County of Riverside 2014, Table MA-2: Basic Compatibility Criteria), this document assumes that airspace review would be required. Therefore, documents would be submitted and reviewed in accordance with ALUC regulations, and approvals would be required prior to March JPA approval of the Proposed Project. This formal review process is required; however, based on a review of the ALUCP the Proposed Project is believed to be consistent with the ALUCP and it is anticipated that the Proposed Project will be approved. Additionally, based on the Determinations of No Hazard received from the FAA, similar determinations are anticipated from the ALUC and as such, **no impacts** for potential safety hazards would occur during Proposed Project construction.

Operation

Policy 4.1.5 of the Riverside County ALUCP requires that land uses, such as the use of the project site as a cargo building, demonstrate compatibility with the acceptable noise levels shown in Table 3.8-3. The project site is within the 60 to 65 dBA and partially within the 65 to 70 dBA CNEL noise level contour boundaries of March ARB/Inland Port Airport. Based on the Riverside County ALUCP noise level contours for the March ARB/Inland Port Airport, the eastern portion of the Proposed Project would represent a normally acceptable land use based on the Riverside County ALUCP compatibility criteria, with the western portion of the Proposed Project site, within the 65 to 70 dBA CNEL contour, would represent a marginally acceptable land use. As stated in Table 3.8-3, within the normally acceptable portion, “slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.” The western portion of the Proposed Project falling within the marginally acceptable land use category, could “indicate noise exposure... that could cause moderate interference with outdoor activities and indoor activities when windows are open.” However, construction of the building would be required to comply with the California Building Code interior environmental comfort requirement incorporating wall and roof assemblies meeting a composite sound transmission class rating of 50, or an interior hourly sound level of 50 dBA energy equivalent sound level (L_{eq}) within occupied spaces. As such, no noise mitigation is required with building construction compliant with the California Building Code.

As discussed above, state regulations require employers to provide hearing protection for workers exposed to excessive noise (greater than 85 dBA over an 8-hour TWA). Therefore, employees working outside on the project site would be provided hearing protection as needed in accordance with state law. Lastly, and as discussed above under “Construction,” building location and scale would not result in potential safety hazards that would interfere with aircraft operations.

Given the project site’s proximity to an active runway, there is the potential that project features, such as drainage features and vegetation, could attract animals, particularly birds. Birds could pose a safety risk to aircraft in flight, resulting in a potentially significant impact. The Wildlife Hazard Review (Appendix J-3) evaluated the Proposed Project in relation to applicable Wildlife Hazard Management Guidance and Policies and provided recommendations for the project plans, including landscaping, outdoor eating areas, trash receptacles, and type and placement of trees and shrubs. **MM-HAZ-3** (Wildlife Protective Measures) requires the incorporation of these recommendations into the Proposed Project. With implementation of these protective measures, impacts resulting from implementation of the Proposed Project would be **less than significant with mitigation incorporated**.

3.8.5 Mitigation Measures

MM-HAZ-1 Hazardous Materials Contingency Plan. Prior to issuance of a grading permit, the project applicant shall submit to March JPA for review and approval a hazardous materials contingency plan (HMCP) that addresses the potential impacts to soil, soil vapor, and groundwater beneath the project site to ensure the health and safety of construction workers and future occupants of the industrial uses on the site. The HMCP shall include procedures for assessment, characterization, handling, transportation, and disposal of potentially contaminated soils and soil vapor, including metals, PAHs, petroleum hydrocarbons and PFAS in soil, and TCE in soil vapor. Contaminated soils shall be managed and disposed of in accordance with federal, state, and local regulations, and in accordance with the rules of the receiving landfill. The HMCP shall be submitted to U.S. Environmental Protection Agency

Region IX and the state (California Department of Toxic Substances Control and the Santa Ana Regional Water Quality Control Board) for review of the protective measures during work within Site 7, which is under an Environmental Restrictive Covenant. The HMCP shall include health and safety measures for handling contaminated soils and working in potentially contaminated soil vapor, including procedures for soil vapor and breathing zone monitoring in accordance with South Coast Air Quality Management District (SCAQMD) Rule 1166, and control of fugitive dust emissions in accordance with SCAQMD Rules 1403 and 1466. The HMCP shall be implemented at all times during excavation, grading, and construction activities, or other activities that could disturb or be impacted by site soils or soil vapors.

MM-HAZ-2 Stop Work, Groundwater Management. Construction activities shall not disturb existing treatment system (soil vapor extraction [SVE] system) wells or monitoring wells. Although construction activities are not anticipated to encounter groundwater, should groundwater be encountered during excavation and/or construction activities, work activities directly associated with/impacted by the discovery of groundwater shall cease. The project applicant or their designee shall contact the Santa Ana Regional Water Quality Control Board, the March Joint Powers Authority, and the March Air Reserve Base environmental group, all of which oversee the cleanup of CG049/OU5, to determine appropriate procedures to either manage contaminated groundwater or alter construction plans to avoid further contact with contaminated groundwater. Either construction plans shall be altered to avoid groundwater depths, or dewatering activities shall be designed to remove groundwater from excavations as needed to complete proposed activities, characterize the groundwater, and either utilize on-site treatment systems to treat and discharge groundwater, with approval of the treatment system operator and overseeing regulatory agency, or otherwise manage the groundwater as approved by the overseeing regulatory agency. The agreed-upon plan shall be prepared and implemented prior to recommencement of construction activities.

MM-HAZ-3 Wildlife Protective Measures. Project design shall incorporate recommendations included in the Wildlife Hazard Review for the Proposed Project, including screening the parking lot with a screen wall or non-vegetated boundary; moving lunch patios indoors or equipping lunch areas with covered trash receptacles that are emptied daily; eliminating all trees and shrubs from landscaping plans; using only small fescue for groundcover; replacing landscaping with cobbles/stones; or using non-irrigated native hydroseed mixes.

3.8.6 Level of Significance after Mitigation

Impacts include potential exposure to contaminated media associated with Site 7 and CG049/OU5. This impact would be mitigated by an HMCP required by **MM-HAZ-1** and by groundwater management measures outlined in **MM-HAZ-2**. Impacts due to wildlife, specifically birds, could increase with increased vegetation and standing water on the project site. These impacts would be reduced by implementation of **MM-HAZ-3**. With implementation of these mitigation measures, impacts would be reduced to **less than significant with mitigation incorporated**. All other impacts relating to hazards and hazardous materials would be **less than significant**.

3.8.7 Cumulative Effects

Impacts associated with hazardous materials are typically localized to the project site. Any impacts associated with this Proposed Project include preexisting contamination due to historical activities. Impacts are not anticipated to be cumulative, as impacts would be controlled on the site and the Proposed Project would not exacerbate existing conditions of hazardous materials. Additionally, similar and nearby projects would also be required to adhere to federal, state, and local regulations that reduce the impacts of handling, transporting, and disposal of hazardous materials as well as reduce the impacts due to potential upset or accident conditions that could occur, either from the Proposed Project or from nearby projects. As such, **no cumulative impacts** would occur.

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3.9 Hydrology and Water Quality

This section describes the existing hydrology, water quality, flooding, and groundwater conditions of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, evaluates potential impacts related to the implementation of the Proposed Project, and identifies recommended mitigation measures to reduce impacts. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Preliminary Hydrology Study, Cargo Gateway D-1 Parcel Development, prepared by DRC Engineering in October 2020, revised in January 2022 (Appendix K-1)
- Project-Specific Water Quality Management Plan (Project-Specific WQMP), D-1 Parcel, prepared by DRC Engineering in October 2020, revised in January 2022 (Appendix K-2)
- Draft Geotechnical Exploration, Proposed Gateway Aviation Center-Meridian Park D-1, SW of Heacock Street and Iris Avenue, March ARB [Air Reserve Base], Moreno Valley, California, prepared by Leighton Consulting Inc. in October 2020 (Appendix H)

Other sources consulted are listed in Section 3.9.8, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March Joint Powers Authority (JPA). The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.9.1 Existing Conditions

Regional Watershed

The project site is located within the Santa Ana River Watershed, which drains a 2,650-square-mile area in Southern California (SAWPA 2014). This watershed is home to more than 6 million people and includes major population centers, such as parts of Orange, Riverside, and San Bernardino Counties, as well as a small part of Los Angeles County. The Santa Ana River flows over 100 miles and drains the largest coastal stream system in Southern California. The watershed eventually flows into the Pacific Ocean in the City of Huntington Beach. The total length of the Santa Ana River and its major tributaries is approximately 700 miles.

The Santa Ana River Watershed is subdivided into several subwatersheds. The project site is located within the San Jacinto River Subwatershed. The San Jacinto River is a 42-mile-long ephemeral river that typically only flows during wet periods. The headwaters of the Santa Ana River are located east of the site in the San Jacinto Mountains. Flow from the headwaters runs westerly to Canyon Lake, and then typically drains into Lake Elsinore, which has significant flood storage. During extreme precipitation events, flow may exceed Lake Elsinore's storage capacity, at

which point the San Jacinto River is connected to the Santa Ana River through the Temescal Wash (SWRCB 2015). The site drains to the San Jacinto River via the Perris Valley Channel.

On-Site Drainage

The topography of the project site and vicinity is relatively flat. Site elevations range from approximately 1,490 to 1,495 feet above the North American Vertical Datum of 1988 (NAVD 88). The Preliminary Hydrology Study (Appendix K-1) indicates that the project site can be divided into seven primary drainage areas (Drainage Areas A through G in Table 3.9-1 and Figures 3.9-1a and 3.9-1b, Existing Project Site Hydrology). After completion of the Preliminary Hydrology Study, the project site was expanded to include the Off-Site Component Boundary and On-Site Access Road and Intersection Improvements shown on Figure 2-11, Off-Site Component Development Plan, in Chapter 2, Project Description. The Preliminary Hydrology Study was updated in January 2022 to include these additional components and to incorporate changes to the site layout resulting from avoidance of the burn areas within Site 7.

The delineated drainage areas separate the project site and its contributing watershed area based on unique hydrologic features (e.g., topography/flow directions, drainage paths, and channels). Figures 3.9-1a and 3.9-1b present the seven existing drainage areas within the project site. A summary of the existing drainage conditions within each drainage area is provided in Table 3.9-1. Under existing conditions, the project site has relatively little impervious surface and collects stormwater runoff from off-site areas to the west and northwest of the site and from on-site areas into two earthen drainage channels and one concrete V-ditch, all three of which convey flows to a 36-inch-diameter culvert located at the southern boundary of the project site (Figures 3.9-1a and 3.9-1b). The 36-inch-diameter culvert receives flow from an approximately 280-acre area encompassing both the on-site and off-site drainage areas (all except Drainage Area G).

Table 3.9-1. Existing Project Site Drainage Areas

Drainage Area ID	Size (Acres)	Existing Impervious Area (Acres)	Description
A	60.3	10.8	Located west of the project site and within March ARB (Figure 3.9-1b). This drainage area encompasses approximately 60.3 acres of open brush and portions of airfield runway and taxiway paving on the March ARB to the northwest of the project site. Drainage Area A is bounded by Taxiways A and B to the southeast, Runways 14–32 to the southwest, and Drainage Area B to the north. Drainage Area A drains to an existing 36-inch-diameter culvert, flows southeast under Taxiway A, and discharges to Parcel D-1 (Figure 3.9-2, Proposed Project Hydrology).
B	134.5	6.7	Located northwest of the project site and within March ARB (Figure 3.9-1b). This drainage area encompasses approximately 134.5 acres of open brush and portions of airfield runway and taxiway paving. The area is bounded by Taxiway A to the east, Drainage Area A to the south, Runways 14–32 to the southwest, and Taxiway C to the north. The drainage area drains southeast toward the project site, to an existing 52-inch-diameter culvert that has infilled with silt to approximately 2/3 full, flows southeast under Taxiway A, and discharges to the project site.
C	6.9	3.1	Located in the western portion of the project site (Figure 3.9-1a). This drainage area encompasses approximately 6.9 acres of open brush and portions of airfield runway and taxiway paving and drains to an

Table 3.9-1. Existing Project Site Drainage Areas

Drainage Area ID	Size (Acres)	Existing Impervious Area (Acres)	Description
			on-site drainage swale that extends into Drainage Area D and discharges to the dual 36-inch-diameter reinforced concrete pipe storm drain at the southern boundary of the project site.
D	54.1	2.7	This drainage area makes up the majority of the approximately 34-acre Air Cargo Center Component of the Proposed Project (Figure 3.9-1a). It encompasses relatively flat terrain with open brush and a portion of paved access road. The drainage area drains from north to south, to the three drainage channels located on the project site, and ultimately to the dual 36-inch-diameter culvert located along the southern boundary of the site. This drainage area collects storm runoff from all other drainage areas, except Drainage Area G.
E	21.4	3.2	Generally located north of the project site, within March ARB, although the southern portion is located within the Off-Site Component of the Proposed Project (Figure 3.9-1a). This drainage area encompasses approximately 21.4 acres of open brush and portions of airfield taxiway paving and drains to the on-site drainage channel in Drainage Area D before discharging to the dual 36-inch-diameter culvert located along the southern boundary of the site.
F	1.9	0.6	Located in the southwest portion of the project site (Figure 3.9-1a). This drainage area encompasses approximately 1.9 acres of open brush and airfield taxiway paving and drains to the on-site drainage channel in Drainage Area D before discharging to the dual 36-inch-diameter culvert located along the southern boundary of the site.
G	1.9	0.4	Located in the eastern portion of the project site (Figure 3.9-1a). This drainage area encompasses approximately 1.9 acres of open brush and portions of Heacock Street. Drainage Area G drains south along Heacock Street and discharges at the southern property line of Parcel D. The dual 36-inch-diameter outfall was extended off site underground to a catch basin installed just south of the development, which captures development flow and outlets to the earthen Heacock Channel, just north of San Michele Road. The dual 36-inch-diameter outfall was extended south approximately 1,000 feet and outlets into an earthen swale into the Heacock Channel, just north of San Michele Road.

Source: Appendix K-1.

Notes: ARB = Air Reserve Base.

The existing drainage areas are mapped on Figures 3.9-1a and 3.9-1b.

As described in the Preliminary Hydrology Study (Appendix K-1), the majority of flows from the project site (with the exception of Drainage Area G) drain to the dual 36-inch-diameter culvert located on the southern boundary of the site. The dual 36-inch culvert runs southeast from the site before discharging to a catch basin south of the project site, and then into the Heacock Channel culvert, located along the west side of Heacock Street, at the intersection of Heacock Street and San Michele Road. The Heacock Channel is an earthen channel that conveys stormwater runoff south for approximately 1.3 miles to the Perris Valley Channel–Lateral B. The Perris Valley Channel–Lateral B conveys flows east 1.75 miles toward the Perris Valley Channel, which then flows to the San Jacinto River, Canyon Lake, Lake Elsinore, and, under extremely wet conditions, the Santa Ana River (Appendix K-1; Riverside Flood Control District 2020).

Runoff from Drainage Area G that does not ultimately flow to the dual 36-inch-diameter culvert located at the southern boundary of the project site flows toward Heacock Street. Heacock Street runoff flows south until it enters the Heacock Channel. The flows from Drainage Area G that do not enter the dual 36-inch-diameter culvert are also conveyed via local drainages to the Perris Valley Channel (Riverside Flood Control District 2020).

Surface Water Quality

Stormwater runoff is a significant contributor to local and regional pollution. Urban stormwater runoff is the largest source of unregulated pollution in the waterways of the United States. Federal, state, and regional regulations require the County of Riverside to control the discharge of pollutants to the storm drain system, including the discharge of pollutants from construction sites and areas of new development.

Water quality objectives, plans, and policies for the surface waters within the Santa Ana River Watershed are established in the Santa Ana Regional Water Quality Control Board (RWQCB) Basin Plan (Santa Ana Region Basin Plan), which has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction. In addition, under federal Clean Water Act (CWA) Section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives (Santa Ana RWQCB 2019). The regulatory framework for the Santa Ana Region Basin Plan and the CWA is discussed in Section 3.9.2, Relevant Plans, Policies, and Ordinances. Water bodies downstream of the project site include the Perris Valley Channel, San Jacinto River, Canyon Lake, and Lake Elsinore. The downstream, or “receiving,” water bodies are listed in Table 3.9-2, along with their impairments and beneficial uses.

Table 3.9-2. Identified Receiving Waters

Receiving Waters	EPA-Approved 303(d) List Impairments	Designated Beneficial Uses
Middle and Lower San Jacinto River Watershed		
Perris Valley Storm Drain (or Perris Valley Channel)	N/A	None
San Jacinto River	N/A	Intermittent beneficial use: agricultural water supply; groundwater recharge; contact/non-contact recreation; warm freshwater habitat; wildlife habitat; and threatened or endangered species
Canyon Lake	Nutrients, pathogens	Municipal and domestic water supply; agricultural water supply; groundwater recharge; contact/non-contact recreation; warm freshwater habitat; wildlife habitat; and threatened or endangered species
Lake Elsinore	DDT, nutrients, organic enrichment/low dissolved oxygen, PCBs, toxicity	Municipal and domestic water supply; agricultural water supply; groundwater recharge; contact/non-contact recreation; warm freshwater habitat; wildlife habitat; and threatened or endangered species
San Jacinto Groundwater Basin		
San Jacinto Groundwater Basin	N/A	Municipal and domestic water supply; agricultural water supply; industrial service supply; industrial process supply

Sources: Appendix K-2; Santa Ana RWQCB 2019.

Notes: EPA = U.S. Environmental Protection Agency; N/A = not applicable; PCBs = polychlorinated biphenyls; DDT = dichloro-diphenyl-trichloroethane.

Of the listed bodies of water, the only impaired waters were Canyon Lake, which is listed on the 303(d) list for nutrients and pathogens, and Lake Elsinore, which is listed on the 303(d) list for nutrients, organic enrichment/low dissolved oxygen, polychlorinated biphenyls (PCBs), sediment toxicity, and unknown toxicity (Table 3.9-2) (Appendix K-2; Santa Ana RWQCB 2019).

It should be noted that three Military Cleanup Cases, including a subarea known as Site 7, overlap slightly with the project site, as shown on Figure 2-1, Existing Site Development. A portion of Site 7 is already occupied by existing development (which would not be disturbed). The Proposed Project would leave the portion of Site 7 that includes the burn areas undisturbed. However, as part of the construction of the Proposed Project, the expansion of the existing access roadway to the south of the project site would slightly overlap with Site 7 but would avoid the burn areas within Site 7. The extent of hazardous materials contamination potentially caused by the Proposed Project is described in Section 3.8, Hazards and Hazardous Materials. Contaminants of concern in Site 7 include dioxins, petroleum hydrocarbons, metals (primarily organic lead, inorganic lead, manganese, and beryllium), volatile organic compounds, and perfluorinated compounds. These materials are present in surficial soils and therefore are potentially carried to off-site drainages during storm events that generate stormwater runoff.

Groundwater

The project site is underlain by the San Jacinto Groundwater Basin, which is bounded by the San Jacinto Mountains to the east, the San Timoteo Badlands to the northeast, the Box Mountains to the north, the Santa Rosa Hills and Bell Mountain to the south, and unnamed hills to the west. The San Jacinto Groundwater Basin contains sediments that have filled valleys and underlying canyons incised into crystalline basement rock. The valley fill deposits are generally divided into younger, more permeable alluvium and older, less permeable alluvium (DWR 2006).

The groundwater storage capacity of the San Jacinto Groundwater Basin is estimated to be approximately 3.07 million acre-feet. Prior to the extraction of groundwater from the San Jacinto Groundwater Basin, groundwater generally flowed toward the San Jacinto River and westward out of the San Jacinto Groundwater Basin. However, high extraction rates have produced groundwater depressions and have locally reversed the historical flow pattern. Recharge in the San Jacinto Groundwater Basin occurs primarily from percolation of flow in the San Jacinto River and its tributary streams; less recharge is from infiltration of rainfall into the valley floor. Recharge is also augmented by infiltration ponds in the upper reaches of the San Jacinto River and via percolation of water stored in Lake Perris (located approximately 3 miles southeast of the project site) as well as several other storage ponds distributed throughout the valley (DWR 2006). The San Jacinto Groundwater Basin is the source of groundwater production for Eastern Municipal Water District (EMWD) (EMWD 2020).

In the Santa Ana Region Basin Plan, the project site is identified as located within the Perris–North subbasin (Santa Ana RWQCB 2019). The subbasins are defined based on (1) separation by impervious rock formations or other groundwater barriers, such as geologic faults; (2) distinct flow systems defined by consistent hydraulic gradients that prevent widespread intermixing, even without a physical barrier; and (3) distinct differences in water quality.

The depth to bedrock across the former March Air Force Base (AFB) ranges from aboveground bedrock outcroppings to depths of 900 feet below the ground surface (bgs) (AECOM 2019). Bedrock was encountered at a depth of 40 feet bgs during the Geotechnical Exploration at one soil boring location (Appendix H). Groundwater flow direction is generally to the southeast, and groundwater has been rising at the rate of 1 to 2 feet per year since the early 1990s (AECOM 2019). The reasons for the rising groundwater levels are currently under investigation, but possible causes include changes in land use from primarily agricultural to primarily suburban (mixed residential/commercial uses), infiltration from Lake Perris, and changes in groundwater extraction (e.g., the cessation of pumping at the

former March AFB water supply wells and reduced pumping at the Box Springs Mutual Water Company) (AECOM 2014, 2019). During the geotechnical investigation conducted on the project site, groundwater was encountered at depths ranging from 14.5 to 20 feet bgs. Given that groundwater levels have been rising, it is reasonable to presume that groundwater levels were deeper in the past (Appendix H).

As discussed in Section 3.8, Hazards and Hazardous Materials, groundwater underlying the site is contaminated due to releases of hazardous materials from Site 7 and hazardous material releases that occurred at other locations within the former March AFB. Groundwater contamination in the site is being addressed as part of a broader investigation of groundwater throughout the former March AFB. The extent of hazardous materials groundwater contamination on the project site and the former March AFB is described in Section 3.8. The hazardous materials investigations of the former March AFB provide information on the hydrogeology of March ARB, including the project site.

Flood Hazards

The County of Riverside General Plan Safety Element indicates that the project site is not located within a Dam Hazard Zone (County of Riverside 2021, Figure 5, Dam Hazard Zones). Although not part of a flood hazard zone, the areas immediately upstream of the culverts within Drainage Areas A and B experience ponding during larger storms.

The nearest water body to the project site with the potential to result in flooding is the Perris Valley Channel–Lateral A, which flows from the northwest to southeast and, at its nearest, is located approximately 420 feet northeast of the project site. The Federal Emergency Management Agency (FEMA) indicates that the site is located within Zone D, which is an area defined as having possible, but undetermined, flood hazards (FEMA 2008). Due to its location on a former military facility, the March JPA planning area, on which much of the project site is located, has never been included in floodplain mapping. A recent letter of map revision prepared by FEMA for areas along the Perris Valley Channel–Lateral A indicates that the areas located between the project site and the Perris Valley Channel–Lateral A are subject to a flood elevation of up to 1,486.4 feet NAVD 88 during a 100-year storm (FEMA 2020). As described previously under On-Site Drainage in this section, the project site elevation ranges from approximately 1,490 to 1,495 feet NAVD 88. Because the elevation of the site is greater than the flood elevation identified in the recent letter of map revision, the project site is located outside the 100-year flood zone for the Perris Valley Channel–Lateral A. There are no other areas of known flooding located near the project site.

Environmental Justice

Senate Bill (SB) 535 allocates a minimum of 25% of the Greenhouse Gas Reduction Fund to benefit disadvantaged communities. The California Environmental Protection Agency designated the top 25% highest scoring census tracts in CalEnviroScreen as disadvantaged communities. Assembly Bill 1550 amended SB 535 to require all Greenhouse Gas Reduction Fund investments that benefit disadvantage communities to also be located within those communities. The law also requires that an additional 10% of the fund to be dedicated to low-income households and communities, of which 5% is reserved for low-income households and communities living within 0.5 miles of a designated disadvantaged community.

The project site is located within an SB 535 Disadvantaged Community, Census Tract 6065046700. The Proposed Project would comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002 (Construction General Permit; SWRCB 2013). The Construction General Permit includes regulations to prevent discharge of stormwater runoff to the stormwater system during construction including to off-site disadvantaged communities. In addition, the

Project-Specific WQMP (Appendix K-2) contains source-control best management practices (BMPs), low-impact development BMPs, and treatment-control BMPs (i.e., modular wetland systems) that address all water quality concerns associated with site development, in accordance with the Riverside County Municipal Separate Storm Sewer System (MS4) Permit, to prevent potential adverse project-related water quality impacts to off-site disadvantaged communities, related to operations. Neither Project construction nor Project operations would disproportionately impact nearby populations protected under environmental justice regulations.

The project site is located within an SB 535 Disadvantaged Community, Census Tract 6065046700. As previously discussed, concerns regarding post-construction erosion and siltation are associated with potential increase in the rate of stormwater runoff downstream of a developed site. If not properly constructed in accordance with adequate stormwater detention, development of a site could result in increases in the erosive power of storm runoff within off-site disadvantaged communities. Based on the results of the Preliminary Hydrology Study (Appendix K-1), the Proposed Project would not alter on-site drainage such that increased peak discharges would result in off-site erosion and siltation of downstream water bodies within disadvantaged communities. Project operations would not disproportionately impact nearby populations protected under environmental justice regulations.

As the project site is not subject to flooding, the Proposed Project would not risk release of pollutants into nearby disadvantaged communities. Project operations would not disproportionately impact nearby populations protected under environmental justice regulations.

3.9.2 Relevant Plans, Policies, and Ordinances

Federal

Federal Clean Water Act of 1972

The CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. It is administered by the U.S. Environmental Protection Agency (EPA). The CWA operates on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit. EPA has delegated its authority to implement and enforce most of the applicable water quality provisions of this law to the individual states. In California, the provisions are enforced by nine RWQCBs under the auspices of the State Water Resources Control Board (SWRCB).

Section 303 of the Clean Water Act (Beneficial Use and Water Quality Objectives)

The Santa Ana RWQCB is responsible for the protection of the beneficial uses of waters within Riverside County. The Santa Ana RWQCB uses its planning, permitting, and enforcement authority to implement plans, policies, and provisions for water quality management established in the Santa Ana Region Basin Plan (Santa Ana RWQCB 2019). In accordance with state policy for water quality control, the Santa Ana RWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Santa Ana Region Basin Plan has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction.

Under CWA Section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. Once a water body has been listed as impaired on the 303(d) list, a total maximum daily load (TMDL) for the constituent of concern (pollutant) must be developed for that water body. A TMDL is an estimate of the daily load of pollutants that a water body may receive from point sources, non-point

sources, and natural background conditions (including an appropriate margin of safety) without exceeding its water quality standards. The Santa Ana RWQCB has developed TMDLs for select reaches of water bodies. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL. In general, dischargers within each watershed are collectively responsible for meeting the required reductions and other TMDL requirements by the assigned deadline.

Section 402 of the Clean Water Act – National Pollutant Discharge Elimination System

Under Section 402 of the CWA, the discharge of pollutants through a point source into waters of the United States is prohibited unless the discharge complies with a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES program regulates the discharge of pollutants from municipal and industrial wastewater treatment plants and sewer collection systems, as well as stormwater discharges from industrial facilities, municipalities, and construction sites. In California, implementation and enforcement of the NPDES program is conducted through the SWRCB and the nine RWQCBs. The RWQCBs set standard conditions for each permittee in their region, which include effluent limitations and monitoring programs.

Safe Drinking Water Act

The Safe Drinking Water Act, established under Title 42 of the U.S. Code (USC) Sections 300(f)–300(j-26), was passed by Congress in 1974, with amendments in 1986 and 1996, to protect drinking water derived from rivers, lakes, reservoirs, springs, and groundwater wells. Under this act, EPA sets the standards for drinking water quality and monitors states, local authorities, and water suppliers who enforce those standards. EPA has established protective drinking water standards for more than 90 contaminants, including drinking water regulations issued since the 1996 amendments that strengthen public health protection. National health-based standards for drinking water have been established to protect against both naturally occurring and manmade contaminants that may be found in drinking water.

National Flood Insurance Program

In 1968, Congress created the National Flood Insurance Program in response to the rising cost of taxpayer-funded disaster relief for flood victims and the increasing amount of damage caused by floods. The National Flood Insurance Program makes federally backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. FEMA manages the National Flood Insurance Program and creates Flood Insurance Rate Maps that designate 100-year flood hazard zones (any area that has a 1% chance of flooding in any given year) and delineate other flood hazard areas.

Federal Aviation Administration Guidelines

The Federal Aviation Administration (FAA) Advisory Circular (AC) No. 150/5200-33 (Hazardous Wildlife Attractants on or near Airports) provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports. The advisory circular also discusses airport development projects, including airport construction, expansion, and renovation, affecting aircraft movement near hazardous wildlife attractants. “Hazardous wildlife” is defined as any species of wildlife (birds, mammals, reptiles), including feral animals and domesticated animals not under control, that are associated with aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a strike hazard. Included in the advisory circular are minimum separation criteria for land-use practices that attract hazardous wildlife to the vicinity of airports. Separation distances are based on flight patterns, altitude at which most strikes happen, and

National Transportation Safety Board recommendations. Land use practices discussed in AC No. 150/5200-33 associated with wildlife hazards that are directly applicable to the Proposed Project include the placement and design of new stormwater management facilities, which must drain within 48 hours after the storm event that the stormwater basin was designed to hold.

In AC No. 150/5320-5 (Airport Drainage Design), the FAA recommends a design storm of 5 years for runways and taxiways and 10 years for buildings and facilities.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act; California Water Code Section 13000 et seq.) is the primary water quality control law for California. This statute established enforcement and implementation measures for SWRCB and the nine RWQCBs, which are charged with implementing this law. The Porter-Cologne Act establishes a comprehensive program for the protection of water quality and the beneficial uses of water. It applies to surface waters, wetlands, and groundwater, and to both point and non-point sources. The Porter-Cologne Act also incorporates many provisions of the CWA, such as delegating the NPDES permitting program to SWRCB and the RWQCBs. Whereas the CWA applies to all waters of the United States, the Porter-Cologne Act applies to waters of the state,¹ which includes isolated wetlands and groundwater in addition to federal waters. In addition to other regulatory responsibilities, the RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the state could cause pollution or nuisance, including impacts to public health and the environment.

The Porter-Cologne Act requires a Report of Waste Discharge for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. California Water Code Section 13260(a) requires that any person discharging waste or proposing to discharge waste, other than to a community sewer system, that could affect the quality of the waters of the state, file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States), an NPDES permit is required, which is issued under both federal and state law; for other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (such as groundwater and isolated wetlands), Waste Discharge Requirements (WDRs) are required and are issued exclusively under state law. WDRs typically require many of the same BMPs and pollution control technologies as required by NPDES-derived permits.

NPDES Construction General Permit

Construction projects disturbing more than 1 acre of land during construction are required to comply with the Construction General Permit (SWRCB 2013).² Projects that would disturb more than 1 acre of land during construction are subject to the requirements of the Construction General Permit.

To obtain coverage under the Construction General Permit, the project applicant must electronically submit a Notice of Intent, a stormwater pollution prevention plan (SWPPP), and other documents required by Attachment B of the Construction General Permit. Activities subject to the Construction General Permit include clearing, grading, and

¹ “Waters of the state” are defined in the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code Section 13050[e]).

² Administratively extended until a new order is adopted and is effective.

disturbances to the ground, such as grubbing or excavation. The Construction General Permit also covers linear underground and overhead projects, such as pipeline installations. Construction General Permit activities are regulated at a local level by the appropriate RWQCB.

The Construction General Permit uses a risk-based permitting approach and mandates certain requirements based on the project risk level (i.e., low, medium, and high). The project risk level is based on the risk of sediment discharge and the receiving water risk. The sediment discharge risk depends on the project location and timing (i.e., wet season versus dry season activities). The receiving water risk depends on whether the project would discharge to a sediment-sensitive receiving water. The determination of the project risk level would be made by the project applicant when the Notice of Intent is filed (and more details of the timing of the construction activity are known).

The performance standard in the Construction General Permit is that dischargers shall minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges using controls, structures, and BMPs that achieve Best Available Technology for treatment of toxic and non-conventional pollutants and Best Conventional Technology for treatment of conventional pollutants. A SWPPP must be prepared by a Qualified SWPPP Developer who meets the certification requirements in the Construction General Permit. The purpose of the SWPPP is (1) to identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. Operation of BMPs must be overseen by a Qualified SWPPP Practitioner who meets the requirements outlined in the permit.

The SWPPP must also include a construction site monitoring program. Depending on the project risk level, the monitoring program may include visual observations of site discharges, water quality monitoring of site discharges (pH, turbidity, and non-visible pollutants, if applicable), and receiving water monitoring (pH, turbidity, suspended sediment concentration, and bioassessment).

NPDES Industrial General Permit

The Statewide General Permit for Storm Water Discharges Associated with Industrial Activities, Order 2014-0057-DWQ, NPDES No. CAS000001 (Industrial General Permit) regulates industrial stormwater discharges and authorized non-stormwater discharges from industrial facilities in California. Industrial facilities such as manufacturers, landfills, mining, steam-powered electrical generating facilities, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, and oil and gas facilities are typically required to obtain Industrial General Permit coverage. Facilities subject to the Industrial General Permit must comply with the provisions of the Industrial General Permit by eliminating unauthorized non-stormwater discharges, developing and implementing an Industrial SWPPP, and monitoring stormwater discharges and authorized non-stormwater discharges in accordance with a Monitoring Implementation Plan. The purpose of the Industrial SWPPP is to achieve the following:

1. Demonstrate compliance with the Industrial General Permit.
2. Identify pollutant sources potentially affecting the quality of stormwater discharges.
3. Develop BMPs to reduce or prevent stormwater pollutants associated with industrial activities.
4. Measure the effectiveness of BMPs in preventing or reducing pollutants in stormwater discharges and authorized non-stormwater discharges.
5. Outline the Monitoring Implementation Plan.
6. Provide measurable goals for the implementation of the SWPPP.

7. Ensure that practices at the facility to reduce or prevent pollutants in stormwater discharges and authorized non-stormwater discharges are evaluated and revised to meet changing facility conditions.

The project site drains to locations within March ARB that must comply with discharge management, monitoring, and reporting specified in two Industrial SWPPPs (Waste Discharge Identification [WDID] 8 331022324 and 8 331027232). The project site partially drains to the area regulated under WDID 8 331022324. The Industrial SWPPP for WDID 8 331027232 was not available to review for this analysis. The Industrial SWPPP for WDID 8 331022324 was available to review for this analysis and is summarized below.

The March Inland Port Airport Authority (MIPAA) operates a bulk fuel storage facility and aircraft parking aprons south of the project site. The facility includes the drainage swale to which Drainage Area F (in the proposed condition) runoff would flow (shown on Figure 3.9-2, Proposed Project Site Hydrology). It also includes Taxiway G (a portion of Taxiway G is located within Drainage Areas F and C, as shown on Figure 3.9-2), which would be expanded under the Proposed Project, as described in Section 2.4, Proposed Project. The facility is subject to the Industrial General Permit through the following Standard Industrial Classification code: 5171 – Petroleum Bulk Stations and Terminals. Facilities with this Standard Industrial Classification code that contain vehicle maintenance shops, equipment cleaning operations, or airport de-icing operations are subject to coverage under the Industrial General Permit. MIPAA has prepared an Industrial SWPPP for the facility (MIPAA 2020). Petroleum hydrocarbons and blasting materials from the bulk fuel storage area and petroleum hydrocarbons and total suspended solids from the taxiways, parking, and driveway areas, including Taxiways G and H, are identified in the Industrial SWPPP as the potential pollutants of concern. BMPs for the Taxiway G and H aprons and driveway include requiring regular sweeping of the driveways and aprons and the prohibition of the washing of driveways and aprons.

The airplane fueling operations that would occur on the parking aprons, as well as any maintenance activities and equipment cleaning operations within the proposed air cargo building, would be subject to the requirements of the Industrial General Permit. The existing facility SWPPP and associated Spill Prevention, Control, and Countermeasure Plan (SPCCP) would be updated by a licensed engineer to encompass the Proposed Project development, initiate BMPs (and associated BMP equipment), and purchase BMP materials. The SWPPP/SPCCP updates and updated BMPs would be completed consistent with the Project-Specific WQMP (also refer to “NPDES Riverside County MS4 Permit” under “Local” in this section).

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—Assembly Bill 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley)—collectively known as the Sustainable Groundwater Management Act (SGMA), which requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically overdrafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the California Department of Water Resources provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies to manage basins sustainably and requires the preparation of groundwater sustainability plans for crucial (i.e., medium- to high-priority) groundwater basins in California. Adjudicated basins (groundwater basins in which a judge has designated specific water rights to multiple users within a basin, typically as a result of a dispute over legal rights) are exempt from developing a groundwater sustainability plan.

The project site is located within the San Jacinto Groundwater Basin, which has been designated a high-priority basin, but not critically overdrafted (EMWD 2020). EMWD produces potable groundwater from two management plan areas within the San Jacinto Groundwater Basin: the West San Jacinto Groundwater Basin Management Plan area (West San Jacinto Basin) and the Hemet/San Jacinto Water Management Plan area (Hemet/San Jacinto Basin). The project site, although within the San Jacinto Groundwater Basin boundaries, is not located within the two management plan areas from which EMWD draws groundwater (EMWD 2016).

Local

NPDES Riverside County MS4 Permit

The County of Riverside is a co-permittee under the NPDES Permit for the Riverside Flood Control District (i.e., the County of Riverside MS4 Permit). The NPDES Permit sets limits on pollutants being discharged into waterways and requires all new development and significant redevelopment to incorporate low-impact development (LID) features, as laid out in the County of Riverside 2011 Design Handbook for Low Impact Development Best Management Practices (LID Handbook) (County of Riverside 2011). Projects in the County of Riverside are required to develop and implement a WQMP to reduce pollutants, maintain and reduce downstream erosion, and maintain stream habitat from all new development.

In accordance with the Santa Ana Region Hydromodification Management Plan (required under Provision XII.B.5 of the County of Riverside MS4 Permit), applicants for New Development and Significant Redevelopment projects (i.e., projects in excess of 1 acre) must identify whether the project is subject to Hydrologic Conditions of Concern (HCOC) requirements, and when required, meet the HCOC requirements (Santa Ana RWQCB 2017). The objective of this plan is to manage increases in runoff volumes and decreases in time of concentration that may result from New Development and Significant Redevelopment projects. Applicable projects shall demonstrate compliance with the HCOC maximum extent practicable standards. Areas draining the Perris Valley Channel, including the project site, must comply with the HCOC requirements (Riverside Flood Control District 2012) because the area drains to Canyon Lake and Lake Elsinore, which are considered adequate sumps. An “adequate sump” is a large river, reservoir, or basin that provides significant regional flood protection for the downstream watershed areas and mitigates flows such that any new development or significant redevelopment upstream will not cause a significant change in downstream flow conditions (RBF Consulting 2012).

March JPA is not a co-permittee of (and is not subject to) the Riverside County MS4 Permit. However, the Project-Specific WQMP (Appendix K-2) has been developed in accordance with the LID Handbook (County of Riverside 2011), consistent with March JPA requirements, as described below.

March JPA WQMP Guidance Document

The March JPA WQMP Guidance Document (March JPA 2008) is a document prepared to provide March JPA with guidance, procedures, and a format to implement the regional NPDES land development requirements. Additionally, this document is intended to help March JPA establish consistency with other agencies (e.g., the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, Santa Ana RWQCB, and County of Riverside) that all help protect natural resources. March JPA is not a co-permittee of the Riverside County MS4 Permit but has the legal authority and responsibility to control the quality of stormwater system discharges under NPDES land development regulations. March JPA has chosen to meet the intent of the Riverside County MS4 Permit concerning new development and redevelopment.

The reduction of pollutants in urban stormwater discharge to the maximum extent practicable through the use of structural and nonstructural BMPs is one of the primary objectives of the water quality regulations for MS4s. BMPs typically used to manage runoff water quality include controlling roadway and parking lot contaminants by installing filters with oil and grease absorbents at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing educational programs.

March JPA requires a project-specific preliminary WQMP that includes site-design BMPs, applicable source-control BMPs, and treatment-control BMPs. March JPA uses the most recent guidance, handbooks, and templates adopted by the Riverside County Flood Control and Water Conservation District (and other MS4 co-permittees) as the standard for adequacy when reviewing WQMPs for projects under its authority. The LID Handbook (County of Riverside 2011) is the most recent guidance available for compliance with the Riverside County MS4 Permit. March JPA has the authority to ministerially withhold certificates or permits if BMPs or specifically designed features needed to properly manage potential pollutants are not implemented into a completed project.

NPDES Permit and WDRs for March ARB Stormwater Runoff

The NPDES Permit and WDRs for the March ARB are established by Order No. R8-2010-0005. The March ARB NPDES Permit identified four major discharge points from March ARB. The nearest of these discharge points to the project site is identified as “Discharge Point Serial No. 001,” which is located north of the site, near the intersection of Heacock Street and Krameria Avenue. The discharges flow directly into the Perris Valley Channel–Lateral A. The March ARB NPDES Permit includes discharge prohibitions, effluent limitations verified through a monitoring and reporting program, and requirements for the implementation of BMPs to meet the effluent limitations and discharge prohibitions. The March ARB NPDES Permit requirements are enforced through periodic inspections by Santa Ana RWQCB staff and the submittal of semi-annual reports submitted in accordance with the requirements of the monitoring and reporting program. March JPA has the authority to review projects for compliance with the NPDES Permit and can withhold permits and approvals if a project could result in a conflict with the permit discharge prohibitions or effluent limitations.

March Inland Port Airport Authority Rules and Regulations

The MIPAA Rules and Regulations Manual (MIPAA 2017) provides guidance and procedures on airfield operations. The objective of the manual is to promote the safe and efficient use of MIPAA facilities. Guidelines and procedures include BMPs intended to protect stormwater. The BMPs include facility-wide BMPs and BMPs specific to aircraft, ground vehicle, and equipment maintenance, cleaning, and storage; outdoor handling, storage, and disposal of waste; fuel storage and delivery; building and grounds maintenance; and wastewater treatment. Measures include maintaining adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur and covering nearby storm drains and outlets to surface drainages with spill control mats or blocking them off with absorbent booms to prevent accidental release of pollutants in the event of a spill.

March JPA General Plan

Resource Management Element

The Resource Management Element of the March JPA General Plan includes goals and policies related to water resources. The following goals and policies from the March JPA General Plan apply to the Proposed Project (March JPA 1999). Consistency with these goals and policies is discussed in Section 3.10, Land Use and Planning, of this EIR.

Goal 1: Conserve and protect surface water, groundwater, and imported water resources.

Policy 1.1: Where possible, retain local drainage courses, channels, and creeks in their natural condition.

Policy 1.2: Protect groundwater and surface water resources from depletion and sources of pollution.

Policy 1.4: Require development to conserve water resources, including the use of water efficient plumbing fixtures and irrigation systems.

Policy 1.5: Conserve imported water by requiring water conservation techniques, water-conserving and recycling processes, drought-resistant landscaping, and reclaimed water for irrigation, when available and appropriate.

Policy 1.6: Promote the use of drought tolerant landscaping in development, and encourage the use of reclaimed water for irrigation in parks, golf courses, and industrial uses, as well as for other urban uses, whenever feasible and where legally permitted.

Policy 1.8: Assure that development projects comply with regulatory agency requirements, including federal, state, and regional regulations.

Goal 2: Control flooding to reduce major losses of life and property.

Policy 2.3: Ensure that development does not divert storm water runoff onto adjacent properties, or cause alterations of natural drainage courses that cannot be adequately handled by flood control improvements installed coincident with the development.

Land Use Element

The Land Use Element of the March JPA General Plan includes goals and policies related to utilities and service systems. The following goals and policies from the March JPA General Plan apply to the Proposed Project (March JPA 1999). Consistency with these goals and policies is discussed in Section 3.10 of this EIR.

Goal 13: Secure adequate water supply system capable of meeting normal and emergency demands for existing and future land uses.

Policy 13.2: Enhance local groundwater supplies through development designs which promote an on-site recharge and minimize permeable ground coverage with landscaped areas, open space or recreation areas.

Goal 17: Adequate flood control facilities shall be provided prior to, or concurrent with, development in order to protect the lives and property within the March JPA Planning Area.

Policy 17.1: Provide for the adequate drainage of storm runoff to protect the lives and property within the Planning Area.

Policy 17.3: Require new development to construct new or upgrade existing drainage facilities to accommodate the additional storm runoff caused by the development.

Policy 17.4: Require all storm drain and flood control facilities to be approved and operational prior to the issuance of certificates of occupancy for the associated development.

Safety/Risk Management Element

The Safety/Risk Management Element of the March JPA General Plan includes goals and policies related to a planning area wide approach for preventing the creation of hazards in the planning area and for minimizing the potential for injury, damage, and disruption brought by natural and human-made catastrophes and emergencies. The following goals and policies from the March JPA General Plan apply to the Proposed Project (March JPA 1999). Consistency with these goals and policies is discussed in Section 3.10.

Goal 3: Minimize injury, loss of life, property damage, and economic and social disruption caused by flood hazards.

Policy 3.4: Ensure that development does not divert storm water runoff onto adjacent properties, or cause alterations of natural drainage courses that cannot be adequately handled by existing drainage facilities or the flood control improvements proposed with the development.

Policy 3.5: Require the installation and maintenance of storm drains by property owners.

Policy 3.6: Assess potential environmental drainage impacts of new construction, including the necessity and impact of District drains and privately-owned and operated storm drains adjacent to slopes and stream-bed areas.

Policy 3.7: Utilize and support storm drain maintenance efforts to prevent localized flooding and mud debris flows from overtaxed storm drains during strong storms.

3.9.3 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's impacts to hydrology and water quality are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, as applicable, the March JPA CEQA Guidelines (March JPA 2022). For the purposes of this EIR, a significant impact related to hydrology and water quality would occur if the Proposed Project would:

- HYD-1** Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
- HYD-2** Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- HYD-3** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on or off site.
- HYD-4** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on

or off site, or that would 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.

HYD-5 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.

HYD-6 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

HYD-7 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.9.4 Impacts Analysis

Threshold HYD-1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less-Than-Significant Impact with Mitigation Incorporated.

Stormwater Discharges during Construction

Construction activities, such as demolition and removal of existing structures, grading, excavation, and trenching for site improvements, would result in the disturbance of soils at the project site. Construction site runoff can contain soil particles and sediments from these activities. Dust from construction sites can also be transported to other nearby locations, where the dust can enter runoff or water bodies. Spills or leaks from heavy equipment and machinery, staging areas, or building sites can also enter runoff. Typical pollutants could include petroleum products and heavy metals from equipment, as well as products such as paints, solvents, and cleaning agents, which could contain hazardous constituents.

Construction impacts from development of the Proposed Project would be minimized through compliance with federal, state, and local regulations pertaining to water quality standards. This includes adherence to the Construction General Permit, which is required for ground-disturbing activities that affect more than 1 acre of land in areas that drain to receiving waters or a separate stormwater system. The Construction General Permit would require preparation and implementation of a SWPPP to identify BMPs that protect stormwater runoff and ensure the avoidance of substantial degradation of water quality during construction of the Proposed Project. All demolition and construction activities associated with the Proposed Project, including installation and realignment of utilities, would be subject to existing regulatory requirements. The March JPA would file a Notice of Intent with the SWRCB to comply with the requirements of the Construction General Permit. This process would include preparation of a SWPPP and incorporation of BMPs to control construction-related erosion and sedimentation in dry weather and stormwater runoff.

Typical BMPs that could be incorporated into the SWPPP to protect water quality include the following:

- Covering stockpiled soil at the end of each workday
- Diverting off-site runoff away from the construction site
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities
- Placing perimeter straw wattles to prevent off-site transport of sediment

- Using drop inlet protection (filters and sandbags or straw wattles), with sandbag check dams within paved areas
- Regular watering of exposed soils to control dust during demolition and construction
- Implementing specifications for demolition/construction waste handling and disposal
- Using contained equipment wash-out and vehicle maintenance areas
- Maintaining erosion and sedimentation control measures throughout the construction period
- Stabilizing construction entrances to avoid trucks from imprinting soil and debris onto the project site and adjoining roadways
- Training, including for subcontractors, on general site housekeeping

Compliance with the Construction General Permit would ensure that water quality impacts due to discharge of stormwater runoff to the stormwater system during construction would be **less than significant**.

Non-Stormwater Discharges during Construction (Contaminated Soil and/or Groundwater at Site 7)

Non-stormwater discharges during construction could also be a potential pollutant source for receiving waters, and thus result in potential violation of water quality standards and waste discharge requirements. As described in Chapter 2, Project Description, three Military Cleanup Cases, including a subarea known as Site 7, are located adjacent to the project site, as shown in Figure 2-1. The expansion and modification of the southern access roadway for the Proposed Project would slightly overlap with Site 7 of the CG049/OU5 of the March Air Force Base Superfund Site but would be adjacent to existing development within Site 7 and would avoid the burn areas within Site 7. The contaminants of concern in the area that overlaps with Site 7 could include dioxins, petroleum hydrocarbons, metals (primarily organic lead, inorganic lead, manganese, and beryllium), volatile organic compounds, and perfluorinated compounds. The burn areas within Site 7 would be undisturbed by the Proposed Project. There are two potential ways that pollutants from the cleanup site could enter waterways: (1) ground disturbance within potentially contaminated soils (that could then be exposed to storm runoff) or (2) encountering groundwater in construction excavations.

As discussed in Section 3.8, Hazards and Hazardous Materials, the groundwater contamination documented within CG049/OU5 does not extend into the project site (including the northern and southern access roadways), but does extend into the right-of-way along Heacock Street. Additionally, multiple monitoring and treatment wells are located along the western side of Heacock Street. The Proposed Project would include construction of a 225-foot-long right-turn pocket along the southbound side of Heacock Street and installation of a traffic signal at the existing access roadway (Figure 2-5, Site Plan: Air Cargo Center Component). Construction of the right-turn pocket, traffic signal, and access roadway would occur within the boundaries of the Site 7 and CG049/OU5 contamination plume and treatment area. Because the southern access roadway and right-turn pocket of Heacock Street are within the boundaries of a contaminated site (Site 7 and CG049/OU5), earthmoving activities could potentially encounter contaminated soils and/or groundwater. If this were the case, the impact of the Proposed Project regarding water quality standards and waste discharge requirements would be potentially significant. To reduce potential impacts to soil, soil vapor, and groundwater beneath the site during construction, a hazardous materials contingency plan (HMCP) would be implemented in accordance with **Mitigation Measure (MM) HAZ-1** (Hazardous Materials Contingency Plan; refer to Section 3.8.5 in the Hazards and Hazardous Materials section of the EIR for the full text of **MM-HAZ-1**). The HMCP would include procedures for

assessment, characterization, handling, transportation, and disposal of potentially contaminated soils. Implementation of **MM-HAZ-1** would minimize the risk of the exposure of contaminated soils from Site 7 to stormwater runoff by requiring that contaminated soils be managed and disposed of in accordance with federal, state, and local regulations, and in accordance with the rules of the receiving landfill. As a result, the impact of ground disturbance within Site 7 would be **less than significant with mitigation incorporated**.

Additionally, based on known groundwater conditions beneath the project site (i.e., at depths of 14.5 to 20 feet below the surface) versus the maximum depth of excavation (10 feet), it is not anticipated that groundwater would be encountered. However, because groundwater conditions change over time, and because there has been a general trend of slowly rising groundwater levels over the long term in the vicinity, the potential to encounter groundwater during construction activities cannot be ruled out. If groundwater is encountered, there would be the potential to discharge contaminated groundwater or to temporarily affect contamination plumes, which would be a potentially significant impact. If groundwater is encountered during excavation, **MM-HAZ-2** (Stop Work, Groundwater Management; refer to Section 3.8.5) would require work activities to cease, followed by contacting the Santa Ana RWQCB, the March JPA, the March ARB environmental group, and EPA Region IX, all of which oversee the cleanup of CG049/OU5, to determine appropriate procedures to either manage contaminated groundwater or alter construction plans to avoid further contact with contaminated groundwater. Implementation of **MM-HAZ-2** would avoid the potential to discharge contaminated groundwater or to temporarily affect contamination plumes. Therefore, the impact of the Proposed Project regarding groundwater quality during construction would be **less than significant with mitigation incorporated**.

In summary, with implementation of **MM-HAZ-1** and **MM-HAZ-2**, the impact of the Proposed Project during construction regarding non-stormwater discharge of contaminated soil and/or groundwater would be **less than significant with mitigation incorporated**.

Long-Term Water Quality Impact (Operation and Maintenance)

The Proposed Project would not involve uncontrolled or untreated discharge of sanitary sewer flows into the region's waters or exceed water quality objectives associated with stormwater discharges during the life of the Proposed Project. Compliance with applicable permit conditions and required implementation of water quality BMPs during operation and maintenance of the Proposed Project would eliminate or substantially minimize potential adverse impacts on water quality. The Project-Specific WQMP (Appendix K-2) describes and illustrates how the Proposed Project would comply with the Riverside County MS4 Permit requirements. Source control and operational BMPs have been incorporated into the project design. These include the following:

- **Site Design Measures:** Site design measures require early assessment and evaluation of how site conditions, such as soils, vegetation, and flow paths, would influence the placement of buildings and paved surfaces. The evaluation is used to meet the goals of capturing and treating runoff and maximizing opportunities to mimic natural hydrology. Options for site design measures include buffering natural water features and using green roofs or porous pavement. The Project-Specific WQMP indicates that impervious surfaces were minimized to the maximum extent feasible (while still meeting the Proposed Project's goals and objectives), including preservation of a portion of the Site 7 remediation area (i.e., the burn area) in an undisturbed state (Appendix K-2).

- **Source Control Measures:** Source control measures seek to avoid introduction of water quality pollution/degradation altogether. Source control strategies include things like covering refuse/trash areas, properly managing outdoor storage of equipment/materials, minimizing use of pesticides and fertilizers in landscaping, using sumps or special area drains to send non-stormwater discharges to the sewer, and ensuring regular grounds maintenance. The Project-Specific WQMP identified appropriate BMPs (including the aforementioned ones) to avoid polluted stormwater and non-stormwater discharges (Appendix K-2).
- **Treatment Control Measures:** Treatment control measures retain, treat, and/or infiltrate site runoff produced under normal circumstances, controlling the quality and quantity of stormwater released to the of Riverside County conveyance system. In most situations, this means implementing structural BMPs (e.g., infiltration, bioretention and/or rainfall harvest and re-use) to address the volume and rate of runoff produced by the 85th percentile storm (i.e., design capture volume). The Project-Specific WQMP identifies how stormwater would be captured and routed to two underground detention systems designed to handle the design capture volume and treated by two Modular Wetland Biofiltration Systems prior to discharge to the dual 36-inch-diameter culvert at the southern boundary of the project site. The location and size of the biofiltration systems are shown in Appendix K-2; they have been designed to address runoff from Drainage Areas C through E, encompassing the majority of the site except for Drainage Area F (Appendix K-2).
- **Operation and Maintenance Requirement:** The MS4 Permit requires that maintenance agreements stay in place with each property (executed and then recorded with the County Clerk Recorder) to ensure that permanent treatment control measures developed on site are properly maintained and/or repaired in accordance with the stormwater quality control plan. An Operation and Maintenance Plan and Maintenance Mechanism, including all pertinent forms of educational materials for those personnel who would be maintaining the proposed BMPs, would be submitted at the time of Final WQMP submittal, as required by the MS4 Permit (Appendix K-2).

In addition, **MM-HYD-1** (Water Quality BMPs; provided in full in Section 3.9.5) will be implemented to reduce impacts on water quality. **MM-AQ-6** (Additional Air Quality Tenant Requirements; see Section 4.2, Air Quality) requires that the tenant sweep the property monthly, including parking lot and truck court, to remove road dust, tire wear, brake dust, and other contaminants.

The only proposed improvements within off-site Drainage Areas A and B (shown in Figure 3.9-1b) are the rehabilitation and cleaning of the existing storm drain culverts. Rehabilitation and cleaning of existing infrastructure would not generate new pollutants with the potential to degrade water quality. The only area that would not drain into either of the two proposed underground detention systems (and modular wetland biofiltration systems) is the proposed parking apron west of the cargo building, identified as Drainage Area F in Figure 3.9-2. Under existing conditions, stormwater from Drainage Area F drains toward Drainage Area D and ultimately to the dual 36-inch-diameter culvert at the southern boundary of the project site. However, development of the Proposed Project would increase impervious surfaces within Drainage Area F by approximately 4.6 acres and would alter drainage flows in this area such that runoff would sheet flow toward the grass-lined drainage swale to the southwest. Stormwater runoff rates would increase over existing conditions by 5.5 cubic feet per second (cfs) (see Table 3.9-4, Existing and Proposed Peak Flow Rates, under Threshold HYD-3). However, correspondence with MIPAA staff indicates that the grass-lined swale can handle the increase in flow from Drainage Area F without any appreciable drainage concerns (Appendix K-1). Furthermore, the drainage swale itself is vegetated (self-treating) and thus able to accept

increased flow rates/volumes without resulting in erosion/siltation. See Threshold HYD-3 for additional information pertaining to stormwater runoff rates.

As stated in Section 3.9.1, Existing Conditions, the Proposed Project facilities would be within the jurisdiction of MIPAA. Consequently, the airplane fueling operations that would occur on the parking aprons to the north and west of the proposed cargo building, as well as any maintenance activities and equipment cleaning operation within the proposed cargo building, would be subject to the requirements of the Industrial General Permit. MIPAA would either modify the existing Industrial SWPPP to include the Proposed Project facilities or would develop a separate Industrial SWPPP for the Proposed Project facilities. All Proposed Project operations would also be subject to the applicable stormwater quality BMPs specified in the MIPAA Rules and Regulations (MIPAA 2017). However, the Project-Specific WQMP would be effective on its own at substantially minimizing pollutant discharges to the storm drain system (and downstream receiving waters).

Because the Project-Specific WQMP contains source-control BMPs, low-impact development BMPs, and treatment-control BMPs (i.e., modular wetland systems) that address all water quality concerns associated with site development, in accordance with the Riverside County MS4 Permit, potential adverse project-related water quality impacts related to operations would be **less than significant with mitigation incorporated**.

Threshold HYD-2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less-Than-Significant Impact. As discussed in Section 3.9.1, the project site is underlain by the San Jacinto Groundwater Basin. No wells or direct connections to the underlying aquifers are proposed. Development of the Proposed Project would add approximately 21 acres of impervious surfaces within Drainage Areas D1 through D3 (i.e., the Air Cargo Center Component boundary), as well as additional areas of impervious surfaces within the Off-Site Component boundary and the access roadway and intersection improvements (shown in Table 3.9-3, Proposed Changes in Project Site Drainage Areas, under Threshold HYD-3). The Preliminary Hydrology Study (Appendix K-1) indicates that, based on geotechnical studies for adjacent properties and U.S. Geological Survey soil mapping, the site has low water transmission. As described in Section 3.9.1, recharge in the San Jacinto Groundwater Basin occurs primarily from percolation from the San Jacinto River and its tributary streams; less recharge is from infiltration of rainfall into the valley floor (DWR 2006). Recharge is also augmented by infiltration ponds in the upper reaches of the San Jacinto River and via percolation of water stored in Lake Perris (located approximately 3 miles southeast of the project site), as well as several other storage ponds distributed throughout the valley (DWR 2006). The Proposed Project would not alter streambeds or interfere with the operation of infiltration ponds, and therefore would not interfere with the primary sources of groundwater recharge to the local groundwater basin.

Furthermore, operation of the Proposed Project would not involve dewatering or the direct use of groundwater because potable water would be supplied to the site by the Western Municipal Water District. For the reasons described in Section 3.14, Utilities and Service Systems, the Proposed Project's water demand has been incorporated into the Western Municipal Water District's water supply planning documents, including the conclusion within its 2020 Urban Water Management Plan that it has sufficient supplies over the next 20 years to meet expected demands for customers and member agencies from

2020 through 2045 under normal, single-dry-year, and multiple-dry-year conditions (Metropolitan Water District 2021; WMWD 2021). Although the groundwater sustainability plan has not yet been formally adopted for the West San Jacinto Groundwater Basin (it is in process), the available evidence indicates that implementation of the Proposed Project would not interfere with sustainable groundwater management within the San Jacinto Groundwater Basin.

For the reasons above, the impact of the Proposed Project on groundwater recharge and on sustainable groundwater management would be **less than significant**.

Threshold HYD-3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

Less-Than-Significant Impact. Implementation of the Proposed Project would result in minor alterations to existing drainage patterns on the project site through installation of drainage infrastructure, such as drainage pipes, culverts, and two modular wetland biofiltration systems. Site development would reconfigure some of the on-site drainage areas and result in slight changes to localized flow patterns; however, these changes would not have adverse impacts with regard to stormwater runoff because they would occur in a manner that maintains the general location, flow rate, and flow volume of off-site discharge (Appendix K-1).

On-site stormwater infrastructure would be developed in accordance with the design recommendations of the Preliminary Hydrology Study (Appendix K-1), which were developed to ensure that sufficient stormwater drainage and detention facilities are located on site and that potential areas of standing water for up to a 100-year storm are drawn down with 48 hours of a storm event in order to comply with FAA guidance pertaining to minimizing the potential to attract hazardous wildlife (AC No. 150/5200-33, described in Section 3.9.2). These recommendations include specifications for stormwater conveyance lines, catch basins, and underground detention basins to manage stormwater runoff in a manner that would prevent the occurrence of on-site flooding.

Given the overall drainage strategy, the majority of the project site would continue to drain to the existing dual 36-inch-diameter culvert located on the southern boundary of the site. The drainage patterns for Drainage Areas A and B (Figures 3.9-1a and 3.9-1b) are to remain unchanged by the proposed development. The Site 7 drainage area, which is included in Drainage Area D under existing conditions, would also remain unmodified and thus would be removed from the proposed condition drainage areas discussed below. The existing-condition Drainage Area D would be broken into four distinct drainage areas in the proposed condition. The changes in drainage pattern of each drainage area within the project site are summarized in Table 3.9-3. Note that proposed Drainage Areas D1, D2, and D3, which encompasses the Air Cargo Center Component, parking/landscape areas, and the northern aircraft apron, are referred to as Drainage Management Areas (DMAs) A, B, and C, respectively, in the Project-Specific WQMP (Appendix K-2).

Table 3.9-3. Proposed Changes in Project Site Drainage Areas

Proposed Drainage Area ID	Area (Acres)	Proposed Impervious Surface Area (Acres)	Proposed Changes
A	60.3	10.8	These areas would remain the same as under the existing condition, except the existing 36- and 52-inch-diameter culverts that are located within the Off-Site Component would be improved and connected to the 36-inch-diameter storm drain that carries runoff south of the project site (i.e., runoff to be routed around the Air Cargo Center Component) (Figure 3.9-2). A ponding analysis was performed that verifies that the proposed on-site development would not increase the drawdown time of the airfield ponds or overtop the shoulder of Taxiway A.
B	134.5	6.7	
C	3.7	2.4	This area would be developed into an aircraft apron for the proposed developed site to access March ARB. Area C in the proposed condition would be reduced from 6.9 acres to 3.7 acres and would flow to a proposed drainage infield and discharge to the proposed culvert Line A shown on Figure 3.9-2, Proposed Project Site Hydrology. The southern portion of existing conditions Drainage Area C would become part of Drainage Area F.
D1 (DMA A)	15.6	12.1	Drainage Area D1 would be approximately 15.6 acres and would drain to an underground detention basin (Detention Basin A) consisting of 4,290 LF of 54-inch-diameter HDPE pipe connected by a 54-inch header that provides a total storage volume of 71,670 CF. The detained water would outlet to a diversion structure to mitigate increases in stormwater runoff and limit peak flows to resemble the existing condition prior to discharge to the dual 36-inch culvert that carries runoff south of the project site, shown on Figure 3.9-2.
D2 (DMA B)	4.6	4.3	Drainage Area D2 would be approximately 4.6 acres and would drain to an underground detention basin (Detention Basin B) consisting of 1,232 LF of 54-inch-diameter HDPE pipe connected by a 54-inch header that provides a total storage volume of 19,598 CF. The detained water would outlet to a diversion structure to mitigate increases in stormwater runoff and limit peak flows to resemble the existing condition prior to discharge to the dual 36-inch culvert that carries runoff south of the project site, shown on Figure 3.9-2.
D3 (DMA C)	2.5	1.9	Drainage Area D3 would be approximately 2.5 acres size and would drain to underground Detention Basin A. The detained water would outlet to a diversion structure to mitigate increases in stormwater runoff and limit peak flows to resemble the existing condition prior to discharge to the dual 36-inch culvert that carries runoff south of the project site, shown on Figure 3.9-2.

Table 3.9-3. Proposed Changes in Project Site Drainage Areas

Proposed Drainage Area ID	Area (Acres)	Proposed Impervious Surface Area (Acres)	Proposed Changes
D4	2.1	1	Drainage Area D4 would be approximately 2.1 acres and would include widening of the existing access roadway by 5 to 18 feet. The existing curb-cut and existing concrete swale would convey runoff from D4 to the south property line of Parcel D-1 and discharge to the dual 36-inch culvert that carries runoff south of the project site, shown on Figure 3.9-2.
E	21.3	0.5	A small portion of Drainage Area E is proposed to be developed into taxiway pavement, taxiway shoulder, and a localized airfield drainage sump (included in the Off-Site Component Boundary). Runoff from Drainage Area E would be routed to a V-ditch and conveyed to a localized inlet that discharges to culvert Line B shown on Figure 3.9-2.
F	5.2	4.6	This drainage area would be developed into an aircraft apron for the proposed developed site to access March ARB. Drainage Area F in the proposed condition would increase in size from 1.9 acres to 5.2 acres and would flow southwest to the existing storm drain system on March ARB. The apron area would sheet flow into an existing swale located between Taxiway A and Taxiway G. There is no existing storm drain facility in this swale and based on Taxiway G expansion documents and correspondence with MIPAA staff, there are no drainage concerns with the additional flows to the swale. The swale drains northwest approximately 2,200 feet to the southwest and provides drainage in accordance with FAA drainage recommendations. At the southeast corner, the swale is tied into storm drain facilities constructed as part of March ARB and redeveloped in addition by MIP Airport, which converted existing facilities to dual 36-inch-diameter storm drains discharging to a headwall with riprap outlet. Flows continue through an earthen channel to lower Heacock Channel near the intersection of Heacock Street and Nandina Avenue.

Source: Appendix K-1.

Notes: ARB = Air Reserve Base; DMA = Drainage Management Area; LF = linear feet; HDPE = high-density polyethylene; CF = cubic feet; MIPAA = March Inland Port Airport Authority; MIP = March Inland Port; FAA = Federal Aviation Administration. The proposed drainage areas are mapped on Figure 3.9-2.

The overall drainage strategy for the Proposed Project is twofold: (1) to route off-site flows from Drainage Areas A and B (which would remain unchanged by the Proposed Project), shown on Figure 3.9-2, around the Air Cargo Center Component and (2) to capture and treat on-site flows from on-site drainage areas described in Table 3.9-3, Proposed Changes in Project Site Drainage Areas, and shown on Figure 3.9-2 in a manner that mimics predevelopment runoff patterns and volumes. Off-site flows from Drainage Areas A and B would be routed around the site using a siphon structure and duplex storm drain lift station and would rejoin the existing dual 36-inch culvert located south of the project site (shown on Figure 3.9-2). On-site flows in the developed condition would be captured by storm drain inlets located

throughout the project site and conveyed via reinforced concrete pipe (RCP) and high-density polyethylene pipe (HDPE) to two underground detention systems located on the northeastern and southeastern sides of the proposed cargo building (shown on Figure 3.9-2). These underground detention systems (referred to as Detention Basins A and B) have been sized and designed to eliminate the increase in 100-year runoff volumes and peak flow rates that would be caused by the increase in impervious surface coverage in the developed condition, and in accordance with the Riverside County Hydrology Manual. As indicated in Table 3.9-3, Detention Basin A will consist of 4,290 linear feet of 54-inch HDPE pipe, connected by a 54-inch header, which will provide a total storage of 71,670 cubic feet. Detention B will consist of 1,232 linear feet of 54-inch HDPE pipe, connected by a 54-inch header, which will provide a total storage volume of 19,598 cubic feet (Appendix K-1).

On-site storm flow rates were calculated based on Proposed Project buildout. Due to increases in impervious area (from existing condition), there will be an increase between pre- and post-development peak discharge. After an analysis of peak runoff rates and volumes in the 100-year storm scenario, the largest observed increase between the pre- versus post-development runoff volume was in the 6-hour runoff peak discharge. Therefore, the detention systems were designed for a 100-year, 6-hour storm scenario (Appendix K-1). These underground detention systems would also feature modular wetland biofiltration systems to treat stormwater runoff and address stormwater quality (discussed in Threshold HYD-1).

Table 3.9-4, Existing and Proposed Peak Flow Rates, provides a summary of 100-year, 6-hour runoff peak discharge under existing and proposed unmitigated conditions for Subareas C, D, E, and F. Off-site Subareas A and B would not be altered by the Proposed Project. Subarea C would decrease in size post-construction, resulting in a decrease in peak discharge rates. As a result, detention would not be required for Subarea C. Only Subarea D would be routed through Detention Basins A and B. As is evident in Table 3.9-4, Detention Basins A and B would result in reduced 6-hour peak discharge rates of 14.95 cfs and 4.84 cfs, respectively, representing a decrease in 100 year, 6-hour peak discharge rates of 31% and 12%, respectively (Appendix K-1, Preliminary Hydrology Study), prior to discharge to the existing dual 36-inch-diameter culvert located on the southern boundary of the project site (Figure 3.9-2).

Table 3.9-4. Existing and Proposed Peak Flow Rates

Drainage Area	Existing 6-Hour Peak Discharge Rate (cfs)	Proposed 6-Hour Peak Discharge Rate without Detention (cfs)	Proposed 6-Hour Peak Discharge Rate with Detention Basin A (cfs)	Proposed 6-Hour Peak Discharge Rate with Detention Basin B (cfs)
C	10.30	5.57	Detention not required	Detention not required
D	64.86	36.15 ^a	14.95	4.84
E	25.87	25.75	Detention not required	Detention not required
F	2.68	8.18	Detention not required	Detention not required

Source: Appendix K-1 – Hydrology Study.

Notes: cfs = cubic feet per second; N/A = not applicable.

^a Subareas D-1 through D-4 combined. Site 7 was removed from the existing Drainage Area D because this area is not part of the project site and would be unaffected, resulting in a smaller proposed Drainage Area D. Site 7 drainage conditions are unchanged from existing conditions.

A small portion of Drainage Area E is proposed to be developed into taxiway pavement, taxiway shoulder, and a localized airfield drainage sump (included in the Off-Site Component Boundary). As shown in Table 3.9-4, peak discharge rates would decrease slightly under proposed conditions. Runoff from

Drainage Area E would be routed to a V-ditch and conveyed to a localized inlet that discharges to a culvert adjacent to Heacock Street (Figure 3.9-2).

As previously indicated, the only area that would not drain into either of the two proposed underground detention systems (and modular wetland biofiltration systems) is the proposed parking apron west of the cargo building, identified as Drainage Area F in Figure 3.9-2. Under existing conditions, stormwater from Drainage Area F drains toward Drainage Area D and ultimately to the dual 36-inch-diameter culvert at the southern boundary of the project site. However, development of the Proposed Project would increase impervious surfaces within Drainage Area F by approximately 4.6 acres and would alter drainage flows in this area such that runoff would sheet flow toward the grass-lined drainage swale to the southwest. Stormwater runoff rates would increase over existing conditions by 5.5 cfs (see Table 3.9-4). However, as indicated in the Preliminary Hydrology Study (Appendix K-1), correspondence with MIPAA staff indicates that the grass-lined swale can handle the increase in flow from Drainage Area F without any appreciable drainage concerns. Furthermore, the drainage swale itself is vegetated (self-treating) and thus able to accept increased flow rates/volumes without resulting in excess flows downstream (Appendix K-1).

Concerns regarding post-construction erosion and siltation are associated with potential increase in the rate of stormwater runoff downstream of a developed site. If not properly constructed in accordance with adequate stormwater detention, development of a site could result in increases in the erosive power of storm runoff. Based on the results of the Preliminary Hydrology Study (Appendix K-1), as described above, the Proposed Project would not alter on-site drainage such that increased peak discharges would result in on- or off-site erosion and siltation of downstream water bodies, resulting in **less-than-significant** impacts.

The project site is located within an SB 535 Disadvantaged Community, Census Tract 6065046700. As previously discussed, concerns regarding post-construction erosion and siltation are associated with potential increase in the rate of stormwater runoff downstream of a developed site. If not properly constructed in accordance with adequate stormwater detention, development of a site could result in increases in the erosive power of storm runoff within off-site disadvantaged communities. Based on the results of the Preliminary Hydrology Study (Appendix K-1), as described above, the Proposed Project would not alter on-site drainage such that increased peak discharges would result in off-site erosion and siltation of downstream water bodies within disadvantaged communities. Project operations would not disproportionately impact nearby populations protected under environmental justice regulations.

Threshold HYD-4: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site, or that would 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?

Less-Than-Significant Impact. For the same reasons discussed in Threshold HYD-3, the Proposed Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site. The impact would be **less than significant**.

For the same reasons discussed in Threshold HYD-3, the Proposed Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding off-site within nearby disadvantaged communities. Project operations would not disproportionately impact nearby populations protected under environmental justice regulations.

Threshold HYD-5: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

No Impact. The County of Riverside Safety Element indicates that the project site is not located within a Dam Hazard Zone (County of Riverside 2021, Figure 5, Dam Hazard Zones). In addition, FEMA indicates that the project site is located within Zone D, which identifies areas of possible but undetermined flood hazard (FEMA 2008). A recently released letter of map revision for areas along the Perris Valley Channel-Lateral A (FEMA 2020), however, indicates that the project site is at an elevation that is higher than the 100-year flood elevation of 1,486.4 feet NAVD 88. Finally, the Preliminary Hydrology Study included a ponding analysis, which verifies that the proposed on-site development would not increase the drawdown time of the airfield ponds or overtop the shoulder of Taxiway A (Appendix K-1). Because the project site is not subject to flooding, the Proposed Project would not substantially alter the existing drainage pattern of the site or area such that flood flows would be impeded or redirected. **No impacts** would occur.

As previously discussed, because the project site is not subject to flooding, the Proposed Project would not substantially alter the existing drainage pattern of the site or area such that flood flows would be impeded or redirected into nearby disadvantaged communities. Project operations would not disproportionately impact nearby populations protected under environmental justice regulations.

Threshold HYD-6: In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact. As described in Threshold HYD-5, the project site would not be subject to flooding. Therefore, the Proposed Project would not risk release of pollutants due to project site inundation. **No impacts** would occur.

Threshold HYD-7: Would the project conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan?

Less-Than-Significant Impact. For the same reasons discussed in Thresholds HYD-1 and HYD-2, the Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The project site has been planned and designed in a manner that would protect surface water and groundwater quality and would not interfere with groundwater recharge or sustainable management of the San Jacinto Groundwater Basin. The impact would be **less than significant**.

3.9.5 Mitigation Measures

MM-HYD-1 Water Quality BMPs. Project design shall include installing drainage sumps that separate sediment, using grease removal/trap systems, and ensuring that ground support and maintenance equipment washing areas are plumbed to the sanitary sewer (instead of the stormwater system).

In addition, the following mitigation measures, provided in full in Section 3.8, Hazards and Hazardous Materials, shall be implemented to reduce surface water and groundwater impacts:

- **MM-HAZ-1 (Hazardous Materials Contingency Plan)**
- **MM-HAZ-2 (Stop Work, Groundwater Management)**

The following mitigation measure from Section 4.2, Air Quality, shall also be implemented to reduce long-term water quality impacts:

- **MM-AQ-6 (Additional Air Quality Tenant Requirements)**

3.9.6 Level of Significance after Mitigation

Impacts related to water quality standards and groundwater would be reduced to a **less-than-significant** level with implementation of **MM-HYD-1**, which requires project BMPs to protect water quality; **MM-HAZ-1**, which requires the project applicant to implement a Hazardous Materials Contingency Plan); **MM-HAZ-2**, which requires the applicant to contact EPA Region IX and the state to determine appropriate procedures to either manage contaminated groundwater or alter construction plans to avoid further contact with contaminated groundwater; and **MM-AQ-6**, which requires the applicant to sweep the property monthly, including parking lot and truck court, to remove road dust, tire wear, brake dust, and other contaminants. All other impacts related to hydrology and water quality would not occur or would be **less than significant**.

3.9.7 Cumulative Effects

Water Quality

The geographic context for the analysis of cumulative impacts associated with water quality is the Santa Ana River Watershed. Cumulative development in the watersheds, which includes the cumulative projects listed in Table 3-1, Cumulative Projects, will increase impervious areas and add new sources of pollutants in stormwater runoff. Construction activities associated with development could temporarily increase the number of exposed surfaces that could contribute to sediments in stormwater runoff. Additionally, materials associated with construction activities could be deposited on surfaces and carried to receiving waters in stormwater runoff. Continued development and redevelopment within the Santa Ana River and Middle and Lower San Jacinto River Watersheds could also increase the number of impervious surfaces that could increase stormwater runoff rates and amounts, as well as result in changes in land use that may increase the amount of pollutants in stormwater runoff. All cumulative development in the watersheds would be subject to the existing regulatory requirements to protect water quality and minimize increases in stormwater runoff. For example, the Construction General Permit requires the development and implementation of a SWPPP for all construction sites larger than 1 acre to mitigate potential impacts to water quality from polluted stormwater runoff.

Every 2 years, the Santa Ana RWQCB must reevaluate water quality within its geographic region and identify those water bodies not meeting water quality standards. For those impaired water bodies, a TMDL must be prepared and implemented to reduce pollutant loads to levels that would not contribute to a violation of water quality standards. All development within the Santa Ana River and Middle and Lower San Jacinto River Watersheds are subject to the water quality standards outlined in the Basin Plan and must comply with any established TMDLs. The continuing

review process would ensure that cumulative development within the watershed would not substantially degrade water quality.

Co-permittee cities and counties within the Santa Ana River Watershed are subject to the requirements of their respective MS4 Permits. The March JPA is not a co-permittee of the Riverside County MS4 Permit but has the legal authority and responsibility to control the quality of stormwater system discharges under NPDES land development regulations. The March JPA has chosen to meet the intent of the Riverside County MS4 Permit concerning new development and redevelopment. Currently, the MS4 permits require that the project designer and/or contractor of all new development and redevelopment projects that fall under specific “priority” project categories must develop a WQMP, which include LID design requirements related to water quality, consistent with the requirements of the Riverside County MS4 Permit. The LID features would address long-term effects on water quality within the San Jacinto and Santa Ana River Watershed and ensure BMPs and LID designs minimize potential water quality concerns to the maximum extent practicable. Therefore, implementation of the Proposed Project, in addition to the related projects identified in Table 3-1, would not result in cumulatively considerable impacts associated with water quality standards and polluted runoff. Cumulative impacts to water quality would therefore be **less than significant**.

Groundwater Resources

The geographic context for the analysis of cumulative impacts associated with groundwater resources is the San Jacinto Groundwater Basin. The Proposed Project would not use groundwater from the San Jacinto Groundwater Basin during Proposed Project construction and operation, resulting in no cumulative impact related to the depletion of groundwater supplies in the basin. Cumulative projects that increase impervious surfaces within the San Jacinto Groundwater Basin, particularly those projects located in areas with soils that have high water transmission, could decrease groundwater recharge such that cumulative development could interfere with the sustainable management of groundwater in the San Jacinto Groundwater Basin, which is a potentially significant cumulative impact. As discussed under Threshold HYD-2, the project area has soils with low water transmission and consequently the addition of 39.8 acres of impervious surface to the project area would not substantially decrease the potential for groundwater recharge to occur on the project area. Therefore, implementation of the Proposed Project, in addition to the identified related projects identified in Table 3-1, would not result in cumulatively considerable impacts related groundwater resources. Cumulative impacts to groundwater resources would therefore be **less than significant**.

Stormwater Drainage

The geographic context for the analysis of cumulative impacts related to storm drainage is the Perris Valley Channel subwatershed. Cumulative development within the subwatershed will increase the number of impervious surfaces that could cause or contribute to storm drain and receiving water capacity exceedances, alter existing earthen channel profiles (i.e., create erosive downcutting and bank failure), and/or require the construction of new or expanded flood control infrastructure. However, new development within the Perris Valley Channel subwatershed would be subject to the environmental review process and compliance with local stormwater regulations, such as the Construction General Permit, the Section 404 permit process of the CWA, local municipal code requirements, and local WQMP requirements. Therefore, compliance with existing regulatory requirements would ensure that impacts associated with changes in runoff in the watersheds would be minimized. Implementation of the Proposed Project, in addition to the identified related projects identified in Table 3-1, would not result in cumulatively considerable impacts related to stormwater drainage. Cumulative impacts to stormwater drainage would therefore be **less than significant**.

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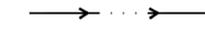
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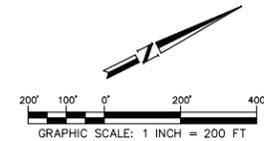
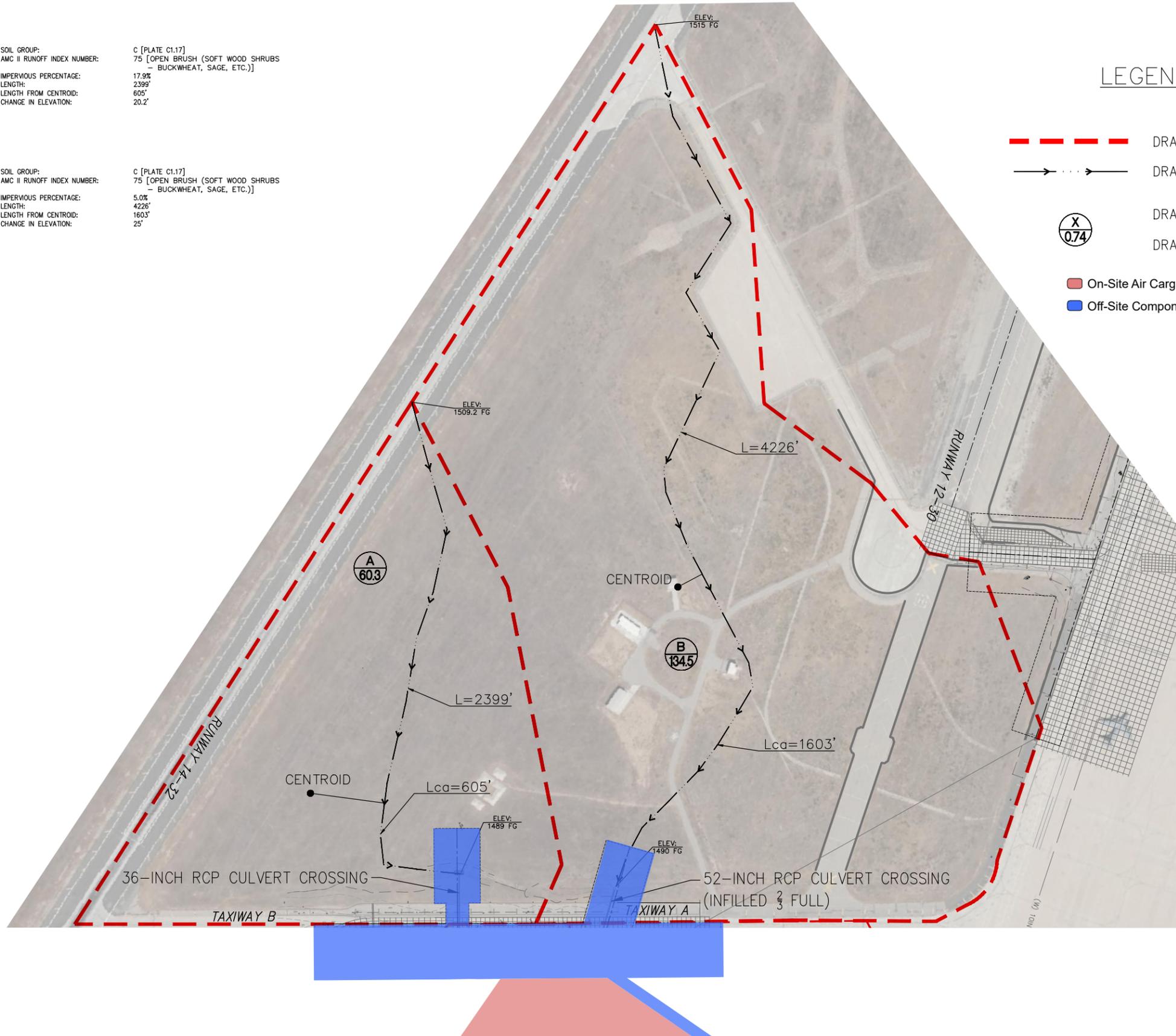
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A
 SOIL GROUP: C [PLATE C1.17]
 AMC II RUNOFF INDEX NUMBER: 75 [OPEN BRUSH (SOFT WOOD SHRUBS - BUCKWHEAT, SAGE, ETC.)]
 IMPERVIOUS PERCENTAGE: 17.9%
 LENGTH: 2399'
 LENGTH FROM CENTROID: 605'
 CHANGE IN ELEVATION: 20.2'

B
 SOIL GROUP: C [PLATE C1.17]
 AMC II RUNOFF INDEX NUMBER: 75 [OPEN BRUSH (SOFT WOOD SHRUBS - BUCKWHEAT, SAGE, ETC.)]
 IMPERVIOUS PERCENTAGE: 5.0%
 LENGTH: 4226'
 LENGTH FROM CENTROID: 1603'
 CHANGE IN ELEVATION: 25'

LEGEND

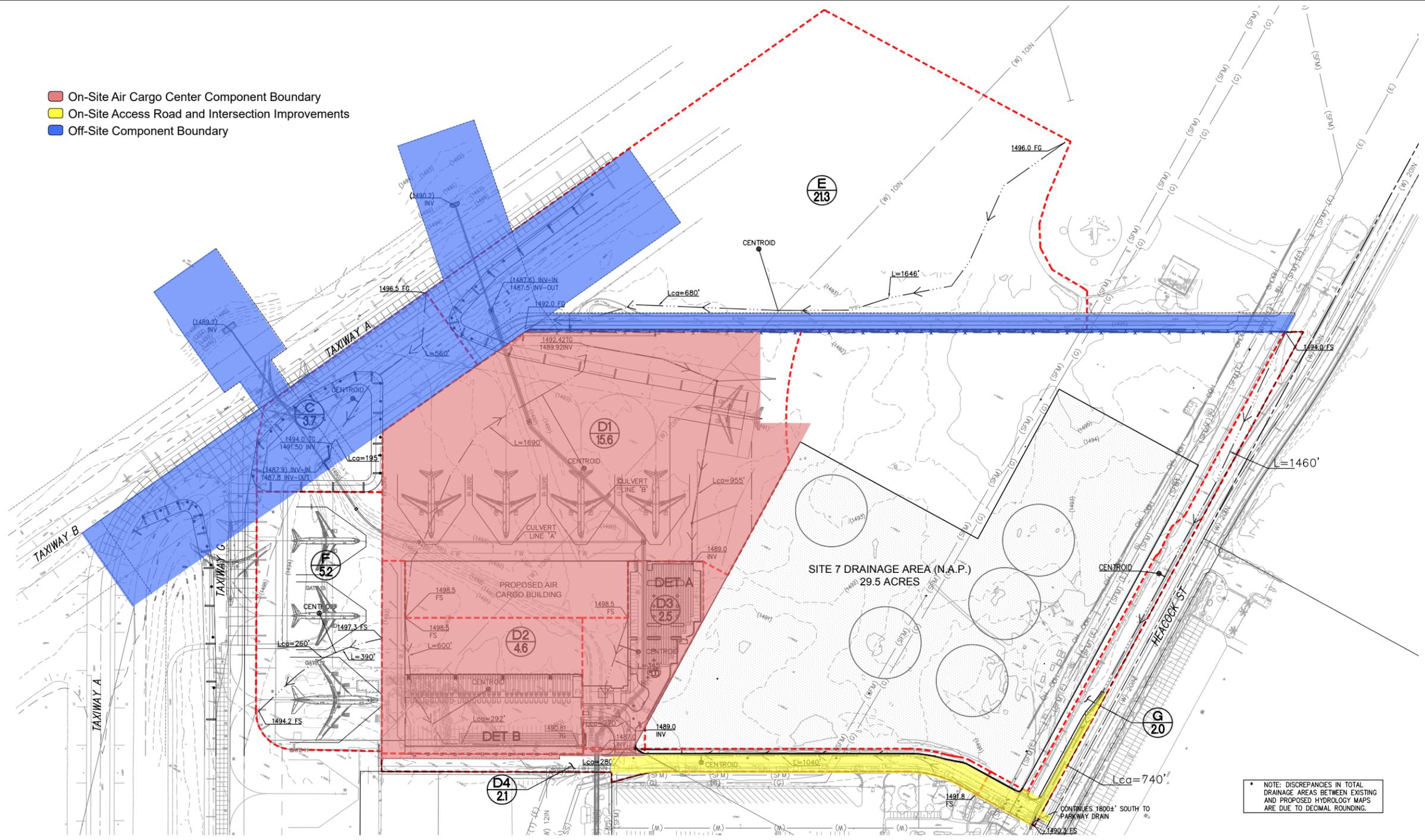
-  DRAINAGE SUBAREA BOUNDARY
-  DRAINAGE FLOW PATH
-  DRAINAGE SUBAREA DESIGNATION
-  DRAINAGE SUBAREA IN ACRES
-  On-Site Air Cargo Center Component Boundary
-  Off-Site Component Boundary



SOURCE: DRC Engineering 2022

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- On-Site Air Cargo Center Component Boundary
- On-Site Access Road and Intersection Improvements
- Off-Site Component Boundary



* NOTE: DISCREPANCIES IN TOTAL DRAINAGE AREAS BETWEEN EXISTING AND PROPOSED HYDROLOGY MAPS ARE DUE TO DECIMAL ROUNDING.

C	SOIL GROUP: AMC II RUNOFF INDEX NUMBER: IMPERVIOUS PERCENTAGE: LENGTH: LENGTH FROM CENTROID: CHANGE IN ELEVATION:	C [PLATE C-1.17] 69 [COMMERCIAL LANDSCAPING (LAWNS, SHRUBS, ETC.)] 66% 560' 195' 2.8'	D2	SOIL GROUP: AMC II RUNOFF INDEX NUMBER: IMPERVIOUS PERCENTAGE: LENGTH: LENGTH FROM CENTROID: CHANGE IN ELEVATION:	C [PLATE C-1.17] 69 [COMMERCIAL LANDSCAPING (LAWNS, SHRUBS, ETC.)] 96% 600' 292' 7.7'	D4	SOIL GROUP: AMC II RUNOFF INDEX NUMBER: IMPERVIOUS PERCENTAGE: LENGTH: LENGTH FROM CENTROID: CHANGE IN ELEVATION:	C [PLATE C-1.17] 75 [OPEN BRUSH (SOFT WOOD SHRUBS - BUCKWHEAT, SAGE, ETC.)] 82% 1040' 280' 4.8'	F	SOIL GROUP: AMC II RUNOFF INDEX NUMBER: IMPERVIOUS PERCENTAGE: LENGTH: LENGTH FROM CENTROID: CHANGE IN ELEVATION:	C [PLATE C-1.17] 69 [COMMERCIAL LANDSCAPING (LAWNS, SHRUBS, ETC.)] 99% 390' 260' 3.1'
D1	SOIL GROUP: AMC II RUNOFF INDEX NUMBER: IMPERVIOUS PERCENTAGE: LENGTH: LENGTH FROM CENTROID: CHANGE IN ELEVATION:	C [PLATE C-1.17] 69 [COMMERCIAL LANDSCAPING (LAWNS, SHRUBS, ETC.)] 91% 1690' 955' 9.5'	D3	SOIL GROUP: AMC II RUNOFF INDEX NUMBER: IMPERVIOUS PERCENTAGE: LENGTH: LENGTH FROM CENTROID: CHANGE IN ELEVATION:	C [PLATE C-1.17] 69 [COMMERCIAL LANDSCAPING (LAWNS, SHRUBS, ETC.)] 79% 345' 270' 9.5'	E	SOIL GROUP: AMC II RUNOFF INDEX NUMBER: IMPERVIOUS PERCENTAGE: LENGTH: LENGTH FROM CENTROID: CHANGE IN ELEVATION:	C [PLATE C1.17] 75 [OPEN BRUSH (SOFT WOOD SHRUBS - BUCKWHEAT, SAGE, ETC.)] 14.8% 1646' 680' 4'	G	SOIL GROUP: AMC II RUNOFF INDEX NUMBER: IMPERVIOUS PERCENTAGE: LENGTH: LENGTH FROM CENTROID: CHANGE IN ELEVATION:	C [PLATE C-1.17] 75 [OPEN BRUSH (SOFT WOOD SHRUBS - BUCKWHEAT, SAGE, ETC.)] 37% 1460' 740' 3.7'

SOURCE: DRC Engineering 2022



FIGURE 3.9-2
Proposed Project Hydrology
Meridian D-1 Gateway Aviation Center Project

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3.10 Land Use and Planning

This section describes the existing land use and planning conditions of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site), identifies associated regulatory requirements, evaluates potential impacts related to the implementation of the Proposed Project, and identifies a Project Design Feature (PDF) and mitigation measures for the Proposed Project, as applicable. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- General Plan of the March Joint Powers Authority (JPA) (March JPA 1999a)
- Master EIR for the General Plan of the March JPA (March JPA 1999b)
- Gateway Aviation Traffic Analysis (TA), July 2023 (Appendix M-1)
- Environmental Justice Element of the March JPA General Plan (March JPA 2024)

Other sources consulted are listed in Section 3.10.9, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port (MIP) Airport under the jurisdiction of March JPA. The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the holiday season (i.e., late November through late December), increased aircraft operations would be anticipated (estimated to result in an additional 128 two-way flights [256 flight operations] over a 4-week period); however, the maximum annual aircraft operations would not exceed the currently available civilian air cargo operations capacity under the joint use agreement.¹ Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.10.1 Existing Conditions

The project site is within March JPA land use jurisdiction, in unincorporated Riverside County, California. The eastern boundary of the project site abuts Heacock Street and extends west to the existing airport tarmac/taxiway within March ARB. The southern boundary abuts the existing warehouse operations associated with the KRIV-Amazon and Hanes/DDI cargo storage and distribution facilities.

General Plan and Zoning

According to the March JPA General Plan Land Use Plan, the project site's land use designation is Aviation (AV), which is shown in Figure 2-2, March JPA General Plan Land Use Designations, in Chapter 2 of this EIR. The project site has not been assigned a zoning designation according to the official March JPA Zoning Map, which is shown on Figure 2-3, March JPA Zoning Designations.

¹ The current capacity of annual civilian air cargo operations is approximately 21,000 flight operations.

Current Land Uses on the Project Site

The project site surface is almost entirely disturbed with minimal vegetation, and fencing is present on all sides except the southwestern portion adjacent to the existing industrial warehouse facilities. A currently vacant former firehouse and a paved airplane taxiway are present in the southwestern portion of the site. Currently, access to the project site is available via an access road directly adjacent to the site's southern boundary, utilized by the existing industrial warehouse facilities to the south. The current land uses within the Off-Site Component consist of an existing aircraft tarmac, aircraft taxiway, and a perimeter patrol road along the northern boundary of the project site.

Surrounding Land Uses

North of the project site is March ARB. To the east of the project site is the Site 7 Area, followed by Heacock Street and existing warehouse operations. To the west of the project site is the existing airport tarmac/taxiway within March ARB, followed by Interstate (I) 215. To the south of the project site are the existing warehouse operations associated with the KRIV-Amazon and Hanes/DDI cargo storage and distribution facilities.

Existing Traffic Conditions

The study area for the existing traffic conditions includes 20 intersections. Additional information is provided in Section 3.12, Transportation, and in Appendix M-1 of this EIR.

3.10.2 Relevant Plans, Policies, and Ordinances

Federal

14 CFR 77.9, Construction or Alteration Requiring Notice

The Federal Aviation Administration (FAA) requires formal notification of any proposed construction that would take place in proximity to an airport pursuant to criteria specified in the Code of Federal Regulations (CFR) Title 14 Section 77.9. Because the project site is located near March ARB, which may impact the assurance of navigation signal reception, Meridian Park D-1 LLC (the project applicant) would file Form FAA 7460-1, Notice of Proposed Construction or Alteration, with FAA.

FAA Advisory Circular 150/5200-33C, Hazardous Wildlife Attractants on or near Airports

FAA Advisory Circular (AC) 150/5200-33 (FAA 2020) provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports. The Advisory Circular also discusses airport development projects, including airport construction, expansion, and renovation, affecting aircraft movement near hazardous wildlife attractants. "Hazardous wildlife" is defined as any species of wildlife (birds, mammals, reptiles), including feral animals and domesticated animals not under control, that are associated with aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a strike hazard. Included within AC 150/5200-33 are minimum separation criteria for land use practices that attract hazardous wildlife to the vicinity of airports. Separation distances are based on flight patterns, the altitude at which most strikes happen, and National Transportation Safety Board recommendations. Land use practices discussed within AC 150/5200-33 associated with wildlife hazards that are directly applicable to the Proposed Project include the placement and design of new stormwater management facilities, which must drain within 48 hours after a storm event.

FAA Form 7460-2, Notice of Actual Construction or Alteration

FAA must make a determination as to whether construction in a navigable airspace creates an impact on existing or proposed arrival, departure, and en-route procedures for aircraft operating under both visual flight rules and instrument flight rules, where there is an impact to existing and public-use airports, military airports, and aeronautical facilities, such as March ARB, and the cumulative impact resulting from the structure when combined with the impact of other existing or proposed structures. At least 48 hours in advance of actual construction or alteration, Form 7460-2 must be filed with FAA.

U.S. Department of the Air Force Joint Use Agreements

On May 7, 1997, a Joint Use Agreement was entered into by March JPA and the U.S. Department of the Air Force (DAF). DAF defines a “joint use airport” as one where the facilities that are owned and operated by DAF are made available for use by civil aviation. The Joint Use Agreement was amended by Amendment 1 on February 21, 2001, and by Amendment 2 on June 20, 2008. Amendments 1 and 2 changed certain conditions for civil aircraft operations and the type of civil aircraft operations authorized at March ARB under the Joint Use Agreement. A new Joint Use Agreement was established on March 14, 2014. The 2014 Joint Use Agreement assigned all of March JPA’s rights and interest under the 1997 Joint Use Agreement to the March Inland Port Airport Authority (MIPAA and DAF 2014). The March Inland Port Airport Authority manages and operates the civilian airport facility MIP Airport. Under the Joint Use Agreement, the civilian and military entities share essential aviation facilities, such as the control towers and runways, as well as maintenance of facilities established by the joint use arrangement. Maximum civilian aircraft activity is limited to 21,000 annual aircraft operations by the Joint Use Agreement and related air quality conformity determination.²

March Air Reserve Base Instruction 13-204 – Airfield Operations

March ARB Instruction 13-204, published on June 2, 2017, provides guidance and procedures on airfield operations at March ARB. In addition, the instruction includes a general description of the airfield components, air operations, and emergency procedures that apply within March ARB. Compliance with the publication is mandatory for individuals at all levels who operate or perform servicing functions on aircraft at March ARB airfield facilities, people who operate within and in the vicinity of March ARB designated airspace, and personnel responsible for implementing airfield operations functions, except where noted otherwise.

14 CFR Part 150, Airport Noise Compatibility Planning

14 CFR Part 150, Airport Noise Compatibility Planning, prescribes single systems for measuring noise at airports and surrounding areas that generally provides a highly reliable relationship between projected noise exposure and surveyed reactions of people to noise, as well as for determining exposure of individuals to noise that results from the operations of an airport. It also identifies land uses that are compatible with various levels of exposure of individuals to noise. Included in this section are land uses and the acceptable average noise exposure for each land use, as well as any necessary mitigation.

² An “aircraft operation” refers to a single flight, not a round-trip flight.

March Air Reserve Base/Inland Port Airport Air Installation Compatible Use Zone

DAF has developed the Air Installation Compatible Use Zones (AICUZ) program to minimize development that is incompatible with aviation operations in areas on and adjacent to military airfields. The AICUZ land use recommendations are based on (1) land use compatibility with exposure to aircraft noise and (2) safety considerations. Recommended compatible land uses are derived from data on noise contours (noise zones) and safety zones (clear zones and accident potential zones).

The 2018 March ARB/Inland Port Airport AICUZ Study (March ARB AICUZ Study; March ARB 2018) is an update of the 2005 AICUZ study. The update is a reevaluation of aircraft noise and accident potential related to DAF flying operations and is designed to aid in the development of local planning mechanisms protecting public health and safety, as well as preserving the operational capabilities of March ARB. The update also provides noise contours based on the community noise equivalent level (CNEL) metric and utilizes a planning noise contour. The project site is located within the 60 A-weighted decibel (dBA) to 70 dBA noise contour level (refer to Figure 3.11-12, March ARB 2018 AICUZ Noise Contours, of this EIR). Industrial land uses are considered compatible with areas exposed to noise up to 80 dBA CNEL (March ARB 2018). Commercial land uses, such as offices, are compatible with no mitigation up to a 70 dBA yearly day-night average sound level (L_{dn}), and up to an 80 dBA yearly L_{dn} when mitigated with noise-attenuating features.

State

California Aeronautics Act

In accordance with provisions of the California State Aeronautics Act (California Public Utilities Code Section 21670 et seq.), to provide for the orderly development of each public use airport and its surrounding area, generally every county with an airport has established an airport land use commission (ALUC). The Riverside County ALUC has been assigned the lead responsibility for airport land use compatibility planning around each of the public-use and military airports in Riverside County. The project site is located within the March ARB/Inland Port Airport Influence Area in unincorporated Riverside County; therefore, the Proposed Project is subject to review and approval by the Riverside County ALUC.

The March ARB/Inland Port Airport Land Use Compatibility Plan (ALUCP) was prepared for and adopted by the Riverside County ALUC on November 13, 2014. The purpose of the March ARB/Inland Port ALUCP is to promote compatibility between March ARB/Inland Port Airport and the land uses that surround the joint-use airport, to the extent such areas are not already devoted to incompatible uses. The March ARB/Inland Port ALUCP regulates future development of new residential dwellings, commercial structures, and other noise- or risk-sensitive uses within the Airport Influence Area based on factors enumerated in the ALUCP, including but not limited to noise, overflight, safety, and airspace protection. The project site is located in Zone B2, High Noise Zone. The B2 Zone is subject to high noise and a moderate accident potential risk (Riverside County ALUC 2014). The land uses prohibited within the B2 Zone include new dwellings, schools, daycare centers, libraries, hospitals, congregate care facilities, hotels/motels, places of assembly, buildings with more than three aboveground habitable floors, noise-sensitive outdoor nonresidential uses, critical community infrastructure facilities, and hazards to flight (Riverside County ALUC 2014). Within the B2 Zone, the following restrictions apply (Riverside County ALUC 2014):

- No new dwelling units are permitted.
- An average of 100 people per acre can occupy the project site, and the most concentrated acre may accommodate up to 250 individuals.

- Prohibited uses include children’s schools, daycare centers, libraries, hospitals, congregate care facilities, and places of assembly.
- In Zones B2 and C1, aboveground storage of more than 6,000 gallons of hazardous or flammable materials per tank is discouraged.
- Noise-sensitive outdoor nonresidential uses are prohibited, examples of which include major spectator-oriented sports stadiums, amphitheaters, concert halls, and drive-in theaters. Caution should be exercised with respect to uses such as poultry farms and nature preserves.
- Hazards to flight, which include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations, and land use development that may cause the attraction of birds are prohibited. Built features must be designed to avoid heightened attraction of birds.

Airspace review is required for objects greater than 35 feet tall, pursuant to 14 CFR Part 77.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) develops the Regional Transportation Plan (RTP), which presents the transportation vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura Counties. Senate Bill (SB) 375 was enacted to reduce greenhouse gas (GHG) emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under the law, SCAG is tasked with developing a Sustainable Communities Strategies (SCS), an element of the RTP that provides a plan for meeting emissions reduction targets set forth by the California Air Resources Board.

The RTP/SCS identifies priorities for transportation planning within the Southern California region, sets goals and policies, and identifies performance measures for transportation improvements to ensure that future projects are consistent with other planning goals for the area. The Federal Transportation Improvement Plan, also prepared by SCAG based on the RTP, lists all the multi-modal transportation projects proposed over a 6-year period. On September 3, 2020, SCAG’s Regional Council adopted Connect SoCal (2020–2045 RTP/SCS), which replaced the 2016 RTP/SCS.

Connect SoCal is a long-range visioning plan that builds on and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians (SCAG 2020).

Western Riverside Council of Governments

The Western Riverside Council of Governments (WRCOG) represents 18 cities, the Riverside County Board of Supervisors, the Eastern and Western Municipal Water Districts, and the Morongo Band of Mission Indians, and sets policy for the organization. WRCOG focuses on a number of regional matters, including transportation, environment, energy, economy, and health. Although March JPA is not a direct member of WRCOG, March JPA’s member agencies (County of Riverside, City of Riverside, City of Moreno Valley, and City of Perris) are members of the regional organization.

Senate Bill 535 and Assembly Bill 1550

Authorized by the California Global Warming Solutions Act of 2006, Assembly Bill (AB) 32, the cap-and-trade program is one of several strategies that California uses to reduce GHGs that cause climate change. The state's portion of the cap-and-trade auction proceeds are deposited in the Greenhouse Gas Reduction Fund (GHG Reduction Fund) and used to further the objectives of AB 32. In 2012, the Legislature passed SB 535, directing that 25% of the proceeds from the GHG Reduction Fund go to projects that provide a benefit to disadvantaged communities.³ In 2016, the Legislature passed AB 1550, which now requires that 25% of proceeds from the GHG Reduction Fund be spent on projects located in disadvantaged communities. To implement SB 535 and AB 1550, the disadvantaged communities that need to receive the required investments from the state's Greenhouse Gas GHG Reduction Fund were identified using the California Communities Environmental Health Screening Tool (CalEnviroScreen), which was CalEnviroScreen's primary original purpose.

The project site is in a low-income community pursuant to AB 1550 and an SB 535 disadvantaged community.

California Communities Environmental Health Screening Tool

CalEnviroScreen is a mapping tool developed by the Office of Environmental Health Hazards Assessment to help identify low-income census tracts in California that are disproportionately burdened by and vulnerable to multiple sources of pollution. CalEnviroScreen uses environmental, health, and socioeconomic information based on data sets available from federal and state government sources to produce scores for every census tract in the state. Scores are generated using 20 statewide indicators in 4 categories: exposures, environmental effects, sensitive populations, and socioeconomic factors. Exposures and environmental effects characterize the pollution burden that a community faces, and sensitive populations and socioeconomic factors define population characteristics. Use of CalEnviroScreen mapping and data for the purpose of California Environmental Quality Act (CEQA) analysis is recommended by the California Governor's Office of Planning and Research, but this has also been a point of debate. Nonetheless, the data and mapping in CalEnviroScreen offer a statewide, georeferenced database combining socioeconomic and environmental factors relevant to environmental justice analysis, which provides useful information for CEQA review in combination with normal project- and site-specific investigations.

Pursuant to SB 535 and based on a recently updated CalEnviroScreen (Version 4.0), the California Environmental Protection Agency updated the designation of disadvantaged communities in May 2022. Version 4.0 was released in October 2021. The California Environmental Protection Agency formally designates four categories of geographic areas as disadvantaged: (1) census tracts with the highest 25% of overall scores in CalEnviroScreen 4.0; (2) census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps, but receiving the highest 5% of CalEnviroScreen 4.0 cumulative pollution burden scores; (3) census tracts identified in 2017 as disadvantaged communities, regardless of their revised scores; and (4) land controlled by federally recognized tribes.

The project site is located within Census Tract 6065046700, which includes all of March ARB, the March JPA Planning Area, and three blocks of the City of Moreno Valley, and has a score of 98 on the CalEnviroScreen. The census tract immediately adjacent to the project site (6065042507) has a CalEnviroScreen score of 78. The maximum

³ "Disadvantaged communities" are defined as areas identified by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code or that are low-income areas that are disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation (California Health and Safety Code Division 26: Air Resources, Part 2: State Air Resources Boards, Chapter 4.1: Greenhouse Gas Reduction Fund Investment Plan and Communities Revitalization Act).

CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Western Riverside County Multiple Species Habitat Conservation Plan

The project site is located within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), a comprehensive, multijurisdictional habitat conservation plan (HCP) focusing on conservation of species and their associated habitats in Western Riverside County (County of Riverside 2003). The MSHCP is one of several large, multijurisdictional habitat-planning efforts in Southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The MSHCP allows Riverside County and its cities to better control local land use decisions and maintain a strong economic climate in the region, while addressing the requirements of the federal Endangered Species Act and the California Endangered Species Act. The MSHCP serves as an HCP pursuant to Section 10(a)(1)(b) of the federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan under the Natural Communities Conservation Plan Act of 2001. It allows the participating jurisdictions to authorize take of plant and wildlife species identified within the plan area. The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife have authority to regulate the take of threatened, endangered, and rare species. Under the Western Riverside County MSHCP, the wildlife agencies have granted take authorization for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside the Western Riverside County MSHCP conservation area, in exchange for the assembly and management of a coordinated Western Riverside County MSHCP conservation area.

Projects where the lead agency is a signatory to the MSHCP are covered under the MSHCP. March JPA is not a signatory to the MSHCP. As such, a development within the March JPA Planning Area would not be subject to MSHCP regulations, nor would it receive take authority granted under the MSHCP. However, if needed, March JPA could seek take coverage through the MSHCP Participating Special Entity process and convey that take to a project applicant. The activities of the Participating Special Entity must comply with the terms and requirements of the MSHCP permits, the MSHCP, and the Agreement with the Participating Special Entity. Participating Special Entities also contribute to the MSHCP through payment of a fee based on the type of proposed activity, which shall be applicable to all activities in the MSHCP area.

Local

March Air Force Base Master Reuse Plan

After March Air Force Base (AFB) was slated for realignment, March JPA was established to plan for the economic revitalization of the area and recognized by the Department of Defense and the State of California as the official “local redevelopment agency” for March AFB. The base reuse planning process involved three primary phases: (1) base-wide reuse planning, (2) disposal decision making, and (3) parcel-by-parcel decision implementation.

In the first phase, base-wide reuse planning, March JPA developed the March AFB Master Reuse Plan in accordance with federal requirements for DAF to identify means of revitalizing or redeveloping the realigned military installation in a beneficial manner (March JPA 1996). The primary function of the Master Reuse Plan was to facilitate economic recovery after base realignment. The principal task in the first phase was the development of alternative land use patterns for the reuse lands which (1) were logical and reasonably feasible based on available information, (2) reflected the consensus of representatives from the four jurisdictions around the base, and (3) included a “Community Preferred” pattern that reflected the ultimate reuse goals of neighboring communities. Through the planning process described in Section II of

the Master Reuse Plan, March JPA developed the Preferred Land Use Pattern, along with three alternatives: Alternative Pattern, Partially Constrained Stephens' Kangaroo Rat Pattern, and Fully Constrained Stephens' Kangaroo Rat Pattern.

In the second phase, disposal decision making, DAF completed an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act, reviewing the Master Reuse Plan's Preferred Land Use Pattern along with the three alternatives. DAF issued a Record of Decision selecting the Preferred Land Use Pattern as set forth in the Master Reuse Plan. The Master Reuse Plan and its EIS were the final documents for property reuse and disposal.

The third phase, parcel-by-parcel decision implementation, started with the development of the March JPA General Plan (March JPA 1999a). The Preferred Land Use Pattern of the Master Reuse Plan served as the basis for the March JPA General Plan. The Master Reuse Plan remains an important document for historical purposes but does not control land use development decisions within the March JPA Planning Area.

March Joint Powers Authority General Plan

The March JPA General Plan is a long-range comprehensive plan designed to outline and delineate use and development of an area known formerly as March AFB, prior to the base realignment in April 1996 to become March ARB. The March JPA General Plan is designed to implement the March AFB Master Reuse Plan, which includes the disposal and redevelopment of approximately 4,400 acres of the 6,500-acre former March AFB. The March JPA General Plan establishes goals and policies to reach long-term objectives and establishes long-term policies for day-to-day decisions based on those objectives (March JPA 1999a). The March JPA adopted the General Plan in 1999. The March JPA General Plan designates the project site as Aviation. The goals and policies relevant to the Proposed Project are contained within the March JPA General Plan Land Use Element, Transportation Element, Noise/Air Quality Element, Resource Management Element, and Safety/Risk Management Element, and Environmental Justice Element, as described below.

Land Use Element

The Land Use Element is based on the March AFB Master Reuse Plan's preferred land use pattern. This element delineates the general location and distribution of land uses, the extent of existing and proposed land uses for March JPA, and development criteria for development intensity. The goals and policies contained within the Land Use Element address capitalization on the opportunities within the Planning Area and the reuse and revitalization of existing facilities. The goals and policies contained in the Land Use Element focus on maintaining a balance between commerce, industry, and aviation uses while promoting high-quality development and minimizing land use conflicts.

Transportation Element

The Transportation Element describes the existing circulation conditions in the March JPA planning area, establishes standards for planning improvements to the circulation system, and provides a basis for measurement of circulation system performance in future years. The goals and policies contained in the Transportation Element focus on establishment of a comprehensive transportation system, enhancement of non-vehicular modes of transportation, and promotion of the joint use of March ARB.

Noise/Air Quality Element

The Noise/Air Quality Element addresses noise and air quality due to the nexus of generators and their significance to the General Plan and region. This element examines the existing and future noise environment and noise generators of the area. The element contains measures to reduce conflict and maintain a noise-compatible environment. The element also contains a discussion of local and regional air quality, stationary and mobile emission sources, and programs to reduce pollutant emissions generated.

Resource Management Element

The Resource Management Element provides for the conservation, development, and use of natural, historical, and cultural resources. The Resource Management Element also details plans and measures for the preservation of open space designed to promote the management of natural resources, outdoor recreation, and public health and safety.

Safety/Risk Management Element

The Safety/Risk Management Element identifies and establishes standards and plans for the protection of the planning area from a variety of hazards including earthquakes, flooding, fire, and geological and airport compatibility conditions.

Environmental Justice Element

In April 2024, March JPA adopted an Environmental Justice Element for its General Plan (March JPA 2024). The Environmental Justice Element incorporates the environmental justice policies of the County of Riverside Healthy Communities Element pursuant to California Government Code Section 65301(a). The County of Riverside Board of Supervisors adopted environmental justice policies by Resolution 2021-182 on September 21, 2021. The goal of the Environmental Justice Element is to ensure the consideration of environmental justice policies to improve public health and the environment within the March JPA Planning Area. Policies and new land use development proposed within the March JPA Planning Area will be evaluated for promoting all environmental justice policies. The land use entitlement process provides a key opportunity to address environmental justice policies through the creation of safe, healthy, and environmentally sustainable communities.

March Joint Powers Authority Development Code

The primary implementation mechanism for the Land Use Element is the March JPA Development Code, Title 9, which provides for parcel-specific zone designations for all land within its jurisdiction, regulations for site planning and development, and subdivision regulations (March JPA 2016).

The project site is currently not zoned within the March JPA Zoning Map. The project applicant is requesting a zoning designation of Aviation, consistent with the General Plan land use designation.

3.10.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to land use and planning are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, as applicable, the March JPA CEQA Guidelines (March JPA 2022). According to the CEQA Guidelines, a significant impact related to land use and planning would occur if a project would:

- a) Physically divide an established community.
- b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

As discussed in the Initial Study prepared for the Proposed Project (Appendix A-2 to this EIR), the Proposed Project would not physically divide an established community and no impact would occur (Appendix A-2). Accordingly, this issue is not analyzed within this section of the EIR. For details regarding this threshold, please refer to Section 4.2, Effects Found Not to Be Significant, of this EIR and the Initial Study provided in Appendix A-2.

For the purposes of this analysis, a significant land use impact would occur if the Proposed Project would:

LU-1 Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

3.10.4 Impacts Analysis

Threshold LU-1: Would the project cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

An analysis of the Proposed Project's consistency with each of the relevant land use plans is provided below.

March Joint Powers Authority General Plan Consistency

Less-Than-Significant Impact with Mitigation Incorporated. The Air Cargo Center Component's current land use designation is Aviation (AV) and Public Right-of-Way within Heacock Street in the March JPA General Plan (March JPA 1999a), as shown on Figure 2-2. The Proposed Project would not require a General Plan Amendment because the Aviation land use designation allows for flight line, hangars, and aviation support services such as cargo storage, passenger and air cargo terminals, fixed base operations, aircraft maintenance, and aviation operation services. Table 3.10-1 demonstrates how the Proposed Project promotes consistency with the applicable goals and policies of the March JPA General Plan, including project design features (PDFs) and mitigation measures for incorporation into the Proposed Project.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Land Use Element		
Goal 1	Land Use Plan provides for a balanced mix of land uses that contribute to the regional setting, and capitalize on the assets of the Planning Area, while insuring compatibility throughout the Planning Area and with regional plans.	Consistent. The Proposed Project would enable the operations capacity of the MIP Airport to be more fully utilized to meet regional demands for air cargo services within Southern California, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region. The Proposed Project includes development of a gateway air cargo center that would be consistent with the General Plan land use designation of Aviation (AV). Based on review of the March ARB/Inland Port ALUCP, it is anticipated that the Proposed Project would demonstrate consistency with the land uses in the March ARB/Inland Port ALUCP. In addition, the project applicant is requesting a zoning designation of Aviation (A) for the project site, consistent with the existing General Plan land use designation, as no zoning designation is currently assigned to the project site by the March JPA.
Policy 1.1	Provide for a mix of land uses which implement the Base Master Reuse Plan for March AFB; offer a variety of employment opportunities; and capitalizes, enhances and expands upon existing physical and economic assets of the Planning Area.	Consistent. The Proposed Project would include a cargo building to increase capacity for air cargo services at the MIP Airport, consistent with the existing General Plan land use designation. The March JPA General Plan and the associated land use plan were developed as local land use implementation tools of the March AFB Master Reuse Plan. As such, Proposed Project development would assist with implementation of the Master Reuse Plan. In addition, the proposed development would create new job opportunities and economic benefits within the March JPA planning area.
Policy 1.2	Develop and maintain a system of land use designations and zoning districts which will provide locations for commercial, business park, manufacturing, aviation, public, and open space uses, and which actuates compatible and synergistic land uses.	Consistent. The project applicant is requesting a zoning designation of Aviation (A) for the project site, consistent with the existing General Plan land use designation, as no zoning designation is currently assigned to the project site by the March JPA. The Proposed Project would include the operation of an air cargo center, which would be compatible with the adjacent aviation land uses in the vicinity of the project site.
Policy 1.3	Provide for patterns of land use which can be supported by existing and planned circulation, public facilities, and infrastructure system improvements in a manner that will preserve the March JPA's fiscal capacity.	Consistent. The Proposed Project would be constructed near the southern terminus of an existing roadway (Heacock St.), which is currently developed on the east side with industrial warehouse buildings and on the west side as the March ARB and an existing distribution warehouse. A new signalized intersection on Heacock St. at the existing access roadway would be installed. Public services such as fire and police protection, which are provided to the adjacent industrial development to the south, would serve the project site and, as part of standard development practices, Proposed Project

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		plans would be reviewed by the appropriate public agencies and services to ensure adequate facility capacity.
Policy 1.6	Locate and group commercial and industrial uses which are oriented toward regional service/market areas to promote utilization of regional transportation facilities and development-supporting infrastructure.	Consistent. The Proposed Project would include development of an approximately 180,800-square-foot air cargo center that would enable the operations capacity of the MIP Airport to be more fully utilized to meet regional demands for air cargo services within Southern California. The MIP Airport is close to I-215, a regional transportation facility, enabling efficient distribution of goods to and from the airport. Adequate utility infrastructure is available within or adjacent to the project site. Utility improvements would be limited to on-site extensions to connect to existing infrastructure.
Policy 1.9	Plan for compatible land uses within the aircraft noise impact contours depicted in the Air Installation Compatible Use Zones (AICUZ) Report for the airfield use.	Consistent. The project site is directly south and east of March ARB. Based on the 2018 AICUZ noise level contours, the Proposed Project represents a compatible industrial land use (Table 6-2 of the AICUZ). In addition, the March JPA would review and approve plans and specifications of the Proposed Project. Therefore, the Proposed Project would satisfy the AICUZ compatibility criteria based on the noise level contour boundaries.
Goal 2	Locate land uses to minimize land use conflict or creating competing land uses, and achieve maximum land use compatibility while improving or maintaining the desired integrity of the Planning Area and subregion.	Consistent. The Proposed Project includes development of a gateway air cargo center that can utilize existing infrastructure at the MIP Airport within the March ARB. The project site is located within an area primarily developed with industrial and business park land uses, close to I-215, a regional transportation facility. As such, the Proposed Project would be similar in character to existing nearby development, with the ability to utilize the existing transportation infrastructure to transport goods to and from the site.
Policy 2.1	Avoid conflicts and incompatibilities between land uses through the use of landscaped setbacks and buffers, site design, site orientation, architectural features, walls or fences, density/intensity reductions, reduced hours of operation for commercial and industrial uses, shielding of lighting, and the like.	Consistent. The Proposed Project would include the operation of an air cargo center, which would be compatible with the adjacent aviation land uses in the vicinity of the project site. The Proposed Project would be developed in accordance with the March JPA Development Code that would ensure the Proposed Project meets the setback requirements, height restrictions, site and building design, and site orientation. Through compliance with the March JPA Development Code, the Proposed Project would be compatible with adjacent and surrounding land uses. The project applicant would ensure that project site lighting does not exceed 2,700 kelvin and 750 watts. Furthermore, the Proposed Project would be subject to compliance with Section 9.08.100, Lighting, and light and glare performance standards established in Section 9.10.110, Light and Glare, of the March JPA Development Code.
Policy 2.3	Support land uses that provide a balanced land use pattern of the Planning Area, and discourage land uses that conflict or compete with	Consistent. The Proposed Project would be adjacent to industrial and aviation land uses and would blend in with the industrial visual character of existing development along Heacock St. and the I-215 corridor with the construction of similar uses displaying comparable bulk and scale. The

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
	the services and/or plans of adjoining jurisdictions.	Proposed Project would require a Zoning Designation of Aviation (A), as the site has not been assigned a zoning designation per the official March JPA Zoning Map. With approval of the proposed Zoning Designation, the Proposed Project would be consistent with the General Plan land use designation and zoning district. The Proposed Project’s air cargo operations would support movement of goods associated with the extensive network of nearby warehouse/distribution facilities in Riverside County, primarily in the cities of Moreno Valley and Perris, without exceeding the permitted annual civilian aircraft operations established by the Joint Use Agreement. As such, the Proposed Project would continue an existing development pattern within the industrial area in the vicinity of March ARB without conflicting or competing with existing land uses in adjacent jurisdictions.
Policy 2.4	Protect the interests of, and existing commitments to adjacent residents, property owners, and local jurisdictions in planning land uses.	Consistent. There are no residential developments immediately adjacent to the project site. The nearest residence is located 0.5 miles east of the project site. The project site is bounded by the March ARB to the north and west, and a cargo storage and distribution facility to the south. Heacock St. runs north-south adjacent to the eastern project site boundary. The Proposed Project, including the architectural renderings, would undergo staff review with the March JPA to ensure that the massing, height, siting, and design of the proposed cargo building, on-site circulation, and landscaping comply with the March JPA Development Code and building and construction code, and are compatible with the surrounding area. As such, the Proposed Project would be consistent with the General Plan land use designation and the applicable Development Code standards for the proposed Zoning District.
Goal 3	Manage growth and development to avoid adverse environmental and fiscal effects.	Consistent. The Proposed Project would include development of an approximately 180,800-square-foot air cargo center that would enable the operations capacity of the MIP Airport to be more fully utilized to meet regional demands for air cargo services within Southern California. The Proposed Project would be consistent with the anticipated buildout of the existing March JPA General Plan, Aviation (AV) land use. In addition, the Proposed Project would be designed and developed consistent with the proposed Aviation (A) Zoning District (currently no zoning designation), pursuant to the March JPA Development Code.
Policy 3.1	Manage growth so that its rate does not exceed the ability of March JPA or service districts to provide for an acceptable level of public facilities and services.	Consistent. Public facilities and services are available to the project site, and the Proposed Project would neither burden nor exceed the capacity of the service providers, as discussed in Section 3.14, Utilities and Service Systems, of this EIR. Utility improvements associated with the Proposed Project would be limited to on-site improvements to connect to existing infrastructure. No upsizing of facilities would be required to serve the Proposed Project.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 3.2	Manage the development and reuse of the Planning Area to maintain continuity with existing facilities and the operations of the Air Force Reserves (AFRES); provide for orderly expansion of infrastructure and public services; and minimize impacts on natural environmental resources.	Consistent. The Proposed Project includes development of a gateway air cargo center that can utilize existing infrastructure at the MIP Airport within the March ARB. In addition to the proposed cargo building, the Proposed Project would expand the existing tarmac to allow for improved access to the existing taxiway for the Proposed Project and existing airport users south of the project site. New flight operations associated with the Proposed Project would not result in exceedance of currently permitted civilian air operations capacity under the Joint Use Agreement. The Proposed Project would comply with all requirements set forth in the Joint Use Agreement to avoid impacts to operations of the Air Force Reserves at March ARB and minimize impacts on natural environmental resources.
Policy 3.3	Use finance mechanisms such as benefit assessment districts, development fees, and maintenance districts to ensure new development within the Planning Area constructs the public facilities and fiscally supports the public services necessitated by the development.	Consistent. The Proposed Project would pay all the necessary development and fair-share fees (PDF-TRA-1) associated with development, including the appropriate DIF. While payment of fees would be completed as part of Proposed Project approval, the use of these fees to implement programs and infrastructure improvements cannot be guaranteed by the Proposed Project itself.
Policy 3.4	Assess the fiscal impacts (service costs and revenues) of proposed major development projects to determine the actual cost of providing services.	Consistent. The Proposed Project would pay all the applicable TUMF, DIF, connection/capacity charges, and fair-share fees (PDF-TRA-1) associated with development. The Proposed Project would further pay all service-related fees as set by each individual service provider.
Goal 4	Develop an identity and foster quality development within the Planning Area.	Consistent. The Proposed Project would be developed immediately south and east of and adjacent to March ARB, thereby extending aviation land uses to the south. The Proposed Project would be developed north of an existing industrial land use with civil aircraft operations. Both developments would utilize Taxiway G to access the MIP Airport within March ARB for flight operations. As such, Proposed Project implementation would be consistent with this existing character.
Policy 4.4	Develop a distinctive community identity for commercial, business park and industrial developments that reflect the character and atmosphere of March JPA Planning Area through the use of good planning and design principals, and sound development practices which serve as guidelines for	Consistent. The Proposed Project, including the architectural renderings, would undergo staff review with the March JPA to ensure that the massing, height, siting, and design of the proposed cargo building, on-site circulation and landscaping comply with the March JPA Development Code and building and construction code, and exhibit compatibility with the surrounding area.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
	building materials, colors, site design and orientation, and landscaping.	
Policy 4.6	Encourage the use of master plans and design guidelines to permit the clustering of development and creating campus-like setting of large tracts of land, while capitalizing on areas with unique assets and opportunities.	Consistent. The Proposed Project, including the architectural renderings, would undergo staff review with the March JPA to ensure that the massing, height, siting, and design of the proposed cargo building, on-site circulation and landscaping comply with the March JPA Development Code and building and construction code, and exhibit compatibility with the surrounding area.
Policy 4.7	Develop and enhance the economic climate and create a balanced business community to serve the work force, commerce, and industry of the region.	Consistent. The Proposed Project includes development of a gateway air cargo center to accommodate an average of 17 two-way flights per day. The Proposed Project would create new permanent jobs and help serve the goods movement needs of the region.
Goal 5	Maximize and enhance the tax base and generation of jobs through new, reuse, and joint use opportunities.	Consistent. The Proposed Project includes development of a gateway air cargo center that can utilize existing infrastructure at the MIP Airport within the March ARB. Proposed Project operations would accommodate 17 two-way flights daily, on average, enabling the operations capacity of the MIP Airport to be more fully utilized to meet regional demands for air cargo services within Southern California. In addition, development of the Proposed Project would increase the property value of the site and would provide temporary jobs during short-term construction and permanent jobs during Proposed Project operations.
Policy 5.1	Support the development and establishment of new employment centers and economic development activities that contribute to an improved tax base.	Consistent. See response to Land Use Element Goal 5, above.
Policy 5.5	Encourage the development of commercial, business park and industrial centers to expand the employment and fiscal base of the March JPA Planning Area and the western Riverside County Subregion.	Consistent. See response to Land Use Element Goal 5, above.
Policy 5.6	Encourage employers in the March JPA Planning Area to hire from the local communities when seeking to fill employment positions.	Consistent. Development of the Proposed Project would introduce a new employment-generating land use in a portion of the County with above-average unemployment. Operation of the Proposed Project would require permanent employees. New employment positions would likely be filled by the existing residential population in the greater Riverside County area,

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		providing an opportunity for residents to work locally, rather than commute to surrounding areas throughout the region.
Goal 6	Support the continued Military Mission of March Air Reserve Base, and preservation of the airfield from incompatible land use encroachment.	Consistent. The project site overlaps the Clear Zone (CZ) and Accident Potential Zone (APZ) I (March ARB 2018), located south of the Runway 12-30 alignment; however, the cargo building would be located outside of these zone boundaries. The Riverside County ALUCP identifies the project site as Zone B2, High Noise Zone. The Proposed Project would undergo ALUC review to demonstrate the proposed development is consistent with the ALUCP criteria for Zone B2 prior to approval of the Proposed Project. Based on review of the March ARB/Inland Port ALUCP, it is anticipated that the Proposed Project would demonstrate consistency with Zone B2 criteria and therefore would not conflict with existing airfield operations.
Policy 6.1	Plan for the economic use, reuse, and joint use of the airfield with AFRES.	Consistent. The Proposed Project includes development of a gateway air cargo center that can utilize existing infrastructure at the MIP Airport within the March ARB. In addition, the Proposed Project would expand the existing tarmac to allow for improved access to the existing taxiway for the Proposed Project and existing airport users south of the project site. New civilian flight operations associated with the Proposed Project would not result in exceedance of currently permitted civilian air operations capacity under the Joint Use Agreement.
Policy 6.2	Plan for compatible land uses within the Clear Zone, APZ I and APZ II, as depicted in the Air Installation Compatible Use Zones (AICUZ) Report for the airfield use.	Consistent. See response to Land Use Element Goal 6, above.
Policy 6.3	Ensure that plans and development do not interfere, conflict, or degrade the military mission of March ARB.	Consistent. See response to Land Use Element Goal 6, above. In addition, new civilian flight operations associated with the Proposed Project would not result in exceedance of currently permitted civilian air operations capacity under the Joint Use Agreement.
Policy 6.4	Ensure that plans and development do not conflict with the long-term needs of the Air Force Reserve in terms of encroachment, noise, accident zone, constraints, etc.	Consistent. The project site is located in March ARB/Inland Port ALUCP Compatibility Zone B2, which allows for the uses proposed by the Proposed Project. The project site overlaps the Clear Zone (CZ) and Accident Potential Zone (APZ) I (March ARB 2018), located south of the Runway 12-30 alignment; however, the cargo building would be located outside of these zone boundaries. The Proposed Project would be developed in accordance with the March JPA Development Code that would ensure the Proposed Project meets the setback requirements, height restrictions, site and building design, site orientation, etc. that would be compatible with adjacent and surrounding land uses. Based on review of the March ARB/Inland Port ALUCP, it is anticipated that the Proposed Project would be consistent with the criteria established for Compatibility Zone

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		B2, and therefore would not conflict with the existing or long-term needs of the Air Force Reserve at March ARB.
Policy 6.5	Ensure that plans and development conform to the draft Comprehensive Land Use Plan for March AFB/March Inland Port.	Consistent. Based on review of the March ARB/Inland Port ALUCP, it is anticipated that the Proposed Project would conform to the March ARB/Inland Port ALUCP. Prior to Proposed Project approval, the Proposed Project would require review by the Riverside County ALUC, and ultimately, an ALUCP consistency finding.
Policy 6.6	Ensure that sensitive land uses (i.e., schools, high occupancy land uses, etc.) are discouraged from locating and operating in areas determined to be incompatible with airport operations.	Consistent. The Proposed Project would not introduce any new sensitive land uses such as schools or high occupancy land uses that would present an incompatibility. The Proposed Project would result in the construction of a new air cargo center to accommodate additional civilian flight operations, pursuant to the Joint Use Agreement, and which would be compatible with the adjacent aviation land uses in the vicinity of the project site.
Policy 6.7	Ensure that land uses adhere to floor area ratios applicable under California Department of Transportation (Caltrans) guidelines for airports.	Consistent. The Proposed Project conforms to the floor area ratios as adopted in the March ARB/Inland Port ALUCP, which are more restrictive than the Caltrans guidelines for airports.
Policy 6.8	Ensure that land uses adhere to both military and civilian Part 77 conical surface criteria, relative to height restrictions.	Consistent. The project applicant would submit an FAA Form 7460-1 application to the Federal Aviation Administration for an Obstruction Evaluation/Airport Airspace Analysis to ensure the Proposed Project would not create obstructions to air navigation. Within 5 days after construction of the Proposed Project reaches its greatest height, an FAA Form 7460-2 would be completed by the project applicant or his/her designee and e-filed with FAA.
Goal 7	Maximize the development potential as a regional Intermodal Transportation facility to support both passenger and freight-related air services.	Consistent. The Proposed Project includes development of a gateway air cargo center that would be consistent with the General Plan land use designation of Aviation (AV). The Proposed Project would enable the operations capacity of the MIP Airport to be more fully utilized to meet regional demands for air cargo services within Southern California, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region.
Policy 7.1	Establish an air cargo operation and goods distribution center to serve local, regional, national and international needs.	Consistent. Once developed, the Proposed Project would accommodate 17 two-way flights daily, on average, enabling the operations capacity of the MIP Airport to be more fully utilized to meet regional demands for air cargo services within Southern California. The project site is located in a developed area near numerous large warehouse and distribution facilities that would benefit from increased air freight service at March ARB.
Policy 7.2	Plan for a desirable and feasible site for an intermodal transportation center.	Consistent. The Proposed Project is designed for intermodal transportation of goods. The project site is designed to accommodate up to 7 cargo planes outside the proposed

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		<p>cargo building and 31 truck docking positions. Upon arrival, the air freight cargo would be transferred from the planes to the cargo building, where the cargo would be placed onto trucks and conveyed to distribution centers; this process would also occur in reverse, from a distribution center to the cargo building.</p>
<p>Policy 7.3</p>	<p>Create a goods movement system that meets the regional and sub-regional needs.</p>	<p>Consistent. The Proposed Project would enable the operations capacity of the MIP Airport to be more fully utilized to meet regional demands for air cargo services within Southern California, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region.</p>
<p>Policy 7.5</p>	<p>Facilitate development of aviation uses other than federal aviation, such as commercial passenger and/or freight carrier services.</p>	<p>Consistent. The Proposed Project includes development of an air cargo center that can utilize existing infrastructure at the MIP Airport within the March ARB. In addition to the proposed cargo building, the Proposed Project would expand the existing tarmac to allow for improved access to the existing taxiway for the Proposed Project and existing airport users south of the project site. New civilian flight operations associated with the Proposed Project would not result in exceedance of currently permitted civilian air operations capacity under the Joint Use Agreement.</p>
<p>Policy 7.6</p>	<p>Plan for compatible land uses within the aviation area.</p>	<p>Consistent. The project site is located in March ARB/Inland Port ALUCP Compatibility Zone B2, which allows for the uses proposed by the Proposed Project. The project site overlaps the Clear Zone (CZ) and Accident Potential Zone (APZ) I (March ARB 2018), located south of the Runway 12-30 alignment; however, the cargo building is proposed outside of these zone boundaries. The Proposed Project would be developed in accordance with the March JPA Development Code that would ensure the Proposed Project meets the setback requirements, height restrictions, site and building design, site orientation, etc. that would be compatible with adjacent and surrounding land uses. Based on the latter, as well as review of the March ARB/Inland Port ALUCP, it is anticipated that the Proposed Project would comply with the criteria established for Compatibility Zone B2 and therefore would not conflict with the existing aviation operations in the vicinity of the project site.</p>
<p>Policy 7.7</p>	<p>Encourage commerce and industry that are complementary to joint use of the airfield.</p>	<p>Consistent. The Proposed Project includes development of a gateway air cargo center that can utilize existing infrastructure at the MIP Airport within the March ARB. In addition to the proposed cargo building, the Proposed Project would expand the existing tarmac to allow for improved access to the existing taxiway for the Proposed Project and existing airport users south of the project site. New civilian flight operations associated with the Proposed Project would not result in exceedance of currently permitted civilian air operations capacity under the Joint Use Agreement.</p>

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Goal 8	Preserve the natural beauty, minimize degradation of the March JPA Planning Area, and provide enhancement of environmental resources, and scenic vistas.	Consistent. The project site is located adjacent to the March ARB and other existing industrial developments. Lands designated as Park/Recreation/Open Space and intended for enhancement of environmental resources in the March JPA planning area are primarily located west of I-215. As discussed in the Initial Study prepared for the Proposed Project (Appendix A-2), no view sheds would be obstructed through Proposed Project implementation. The Proposed Project would have no impact on known historical and archaeological resources within the project site and vicinity, as discussed in Section 3.4, Cultural Resources, of this EIR.
Policy 8.2	Sensitive biological resources and habitats, cultural resources, view shed areas shall be protected where practical.	Consistent. As discussed in the Initial Study prepared for the Proposed Project (Appendix A-2), the Proposed Project would minimize impacts on natural environmental resources and modify views in the vicinity of the project site but would not obstruct valued scenic vistas. The Proposed Project would have no impact on known historical and archaeological resources within the project site and vicinity, as discussed in Section 3.4, Cultural Resources, of this EIR. Implementation of MM-CUL-2 (Inadvertent Discovery of Archaeological Resources) would minimize potential impacts associated with inadvertent discovery of archaeological resources during construction activities.
Policy 8.4	Implement federal, state, regional, and local requirements that apply to water and air quality, wetlands, endangered species, and other environmental considerations.	Consistent. The Proposed Project would be constructed in a manner that minimizes, to the extent feasible, impacts to water quality, air quality, wetlands, endangered species, and other environmental considerations, as detailed in this EIR. Where required, mitigation measures would be implemented to reduce potentially significant environmental impacts throughout construction and operation. Therefore, the Proposed Project would continue to implement federal, state, regional and local requirements.
Goal 9	Preserve the integrity of the historic and cultural resources of the Planning Area and provide for their enhancement.	Consistent. The Proposed Project would have no impact on known historical and archaeological resources within the project site and vicinity, as discussed in Section 3.4, Cultural Resources, of this EIR. Implementation of MM-CUL-2 and MM-CUL-3 (Inadvertent Discovery of Human Remains) would minimize potential impacts associated with inadvertent discovery of archaeological resources and human remains during ground-disturbing construction activities, respectively.
Goal 10	Avoid undue burdening of infrastructure, public facilities, and services by requiring new development to contribute to the improvement and development of the March JPA Planning Area.	Consistent. The project site is located adjacent to an area where infrastructure, public facilities, and services already exist. Development of the Proposed Project would contribute to the improvement and development of the March JPA planning area through extension of utility infrastructure on-site and payment of the required DIF, which would contribute to expansion of the facilities and services. Public services such as fire and police protection, which are provided to the adjacent industrial development to the south, would serve the project

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		site and as part of standard development practices, Proposed Project plans would be reviewed by the appropriate public agencies and services to ensure adequate facility capacity.
Policy 10.1	Require new construction to pay its “fair share” of the cost of providing adequate public services, infrastructure, and facilities for the development.	Consistent. The Proposed Project would pay all the necessary DIF and fair-share fees (PDF-TRA-1) associated with development. While payment of fees would be completed as part of Proposed Project approval, the use of these fees to implement programs and street system improvements cannot be guaranteed by the Proposed Project itself.
Policy 10.2	Require new construction to provide adequate infrastructure to serve the development (i.e., curbs and gutters, sidewalks, street lights, water service, sewer service, or septic systems, etc.) prior to initiation of use.	Consistent. The Proposed Project would develop a signalized intersection to provide access to the project site from Heacock St. The project site is currently undeveloped, so on-site improvements would be installed during Proposed Project construction to connect to existing water, sewer, natural gas, and electrical infrastructure within or adjacent to the site. In addition, on-site storm water detention infrastructure would be installed to capture on-site flows.
Policy 10.3	Locate commercial and industrial development in areas where street rights-of-way and capacity are available, as well as sufficient infrastructure and public services.	Consistent. The project site is surrounded by existing development, with access to existing utility infrastructure and existing public facilities to support the Proposed Project. The Proposed Project would require the construction of new on-site streets, water, sewer, natural gas, and electrical improvements to interconnect with existing infrastructure within or adjacent to the site. In addition, public services such as fire and police protection, which are provided to the adjacent industrial development to the south, would serve the project site and as part of standard development practices Proposed Project plans would be reviewed by the appropriate public agencies and services to ensure adequate facility capacity. The Proposed Project would pay all the applicable TUMF and fair-share fees (PDF-TRA-1) associated with development. While payment of fees would be completed as part of Proposed Project approval, the use of these fees to implement programs and street system improvements cannot be guaranteed by the Proposed Project itself.
Policy 10.4	Facilitate the provision of public services, (i.e., sewer, water, streets, and public safety) to be provided in an efficient and cost-effective manner.	Consistent. See response to Land Use Element Policy 10.3, above.
Goal 11	Plan for the location of convenient and adequate public services to serve the existing and future development of March JPA Planning Area.	Consistent. See response to Land Use Element Policy 10.3, above.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 11.2	Provide and maintain existing infrastructure and enhance service levels to meet the needs of March JPA Planning Area.	Consistent. See response to Land Use Element Policy 10.3, above.
Goal 12	Ensure, plan, and provide adequate infrastructure for all facility reuse and new development, including but not limited to, integrated infrastructure planning, financing, and implementation.	Consistent. The project site is surrounded by existing development, with access to existing utility infrastructure and existing public facilities to support the Proposed Project. The Proposed Project would require the construction of new on-site water, sewer, natural gas, and electrical improvements to interconnect with existing infrastructure within or adjacent to the site.
Policy 12.1	Coordinate the provision of all public utilities and services to ensure a consistent, complete and efficient system of service to development.	Consistent. The project site is surrounded by existing development. All necessary public utility infrastructure is located within or adjacent to the project site. Development of the Proposed Project would contribute to the improvement and development of the March JPA planning area through extension of utility infrastructure on-site.
Policy 12.2	Require new construction to pay its “fair share” for the regional infrastructure system by providing appropriate dedications, improvements, and/or fee assessment districts or other financing mechanisms.	Consistent. The Proposed Project would pay all the applicable TUMF and fair-share fees (PDF-TRA-1) associated with development. While payment of fees would be completed as part of Proposed Project approval, the use of these fees to implement programs and street system improvements cannot be guaranteed by the Proposed Project itself.
Policy 12.3	Require new development projects to provide for the extension of infrastructure to serve the development, including over-sizing facilities for future needs.	Consistent. See response to Land Use Element Goal 12, above. While the development would require improvement or enhancement of existing on-site infrastructure, it does not rely on the extension or up-sizing of facilities to achieve sufficient capacity to serve the Proposed Project.
Goal 13	Secure adequate water supply system capable of meeting normal and emergency demands for existing and future land uses.	Consistent. As discussed in Section 3.14, Utilities and Service Systems, of this EIR, WMWD has determined that adequate water supplies do exist to serve the Proposed Project.
Policy 13.1	Only approve development which can demonstrate an adequate and secure water supply for the proposed use.	Consistent. See response to Land Use Element Goal 13, above.
Policy 13.2	Enhance local groundwater supplies through development designs which promote an on-site recharge and minimize impermeable ground coverage with	Consistent. As discussed in Section 3.9, Hydrology and Water Quality, of this EIR, on-site storm drain infrastructure would be installed to direct on-site flows to the existing subsurface detention basins. The on-site storm drain network would provide storage for required runoff treatment prior to discharge to the backbone storm drain system at an allowable discharge

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
	landscaped areas, open space, or recreation areas.	rate. The proposed backbone storm drain system would carry flows south, consistent with existing drainage patterns.
Policy 13.3	Design and operate March JPA facilities in compliance with established water conservation practices and programs.	Consistent. As discussed in Section 3.14, Utilities and Service Systems, of this EIR, the Proposed Project would be served by an existing water system that would provide sufficient capacity to accommodate projected normal and emergency needs.
Goal 14	Establish, extend, maintain and finance a safe and efficient wastewater collection, treatment and disposal system which maximizes treatment and water recharges, minimizes water use, and prevents groundwater contamination.	Consistent. As discussed in Section 3.14, Utilities and Service Systems, of this EIR, on-site sewer improvements would be constructed, extending to the public right-of-way, to interconnect with the existing EMWD 8-inch sewer line within Heacock St. EMWD has available treatment capacity at the Perris Valley Regional Water Reclamation Facility to accommodate wastewater from the project site. In addition, necessary connection fees would be paid to EMWD to provide funding for future expansion of EMWD's wastewater system to accommodate continued growth in its service area.
Policy 14.1	Require all development to adequately collect, treat, and dispose of wastewater in accordance with the Santa Ana Regional Water Quality Control Board requirements.	Consistent. The Proposed Project would treat and dispose of wastewater in conformance with the requirements of the Santa Ana RWQCB.
Policy 14.2	Require connection to the sewer system for any development occurring on land formerly part of March AFB.	Consistent. The project site was formerly part of March AFB. During Proposed Project construction, on-site sewer improvements would be constructed, extending to the public right-of-way, to interconnect with the existing sewer force main within Heacock St.
Policy 14.3	Encourage the reuse of reclaimed and treated non-potable water for irrigation and maintenance of recreation areas, landscaping and open space preservation.	Consistent. Recycled water infrastructure is not proposed within the project site. To reduce the overall water demand required for on-site landscaping, approximately 100% of the proposed landscaping would be non-irrigated.
Goal 15	In compliance with state law, ensure solid waste collection, siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal programs and education are consistent with the County Solid Waste Management Plan.	Consistent. The Proposed Project would comply with the Countywide Integrated Waste Management Plan, in accordance with Assembly Bill 939.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 15.1	Ensure all hazardous materials are stored, treated, and disposed in accordance with state and federal law.	Consistent. The project site is located within Riverside County ALUCP Compatibility Zone B2. The March ARB/Inland Port ALUCP (2014) and the March ARB AICUZ Study (2018) impose restrictions and limitations on the types and quantities of uses and hazardous materials that can be stored on sites within the B2 zone. As discussed in Section 3.8, Hazards and Hazardous Materials, of this EIR, any hazardous materials used on site would be stored, treated, and disposed of in accordance with state and federal law. MM-HAZ-1 (Hazardous Materials Contingency Plan) and MM-HAZ-2 (Stop Work, Groundwater Management) would also be implemented to ensure hazardous materials would be properly handled, stored, treated, and disposed of.
Policy 15.2	Support programs to promote greater awareness and involvement in waste reduction and recycling.	Consistent. See Section 3.14, Utilities and Service Systems, of this EIR. The Proposed Project would comply with the Countywide Integrated Waste Management Plan. In accordance with Assembly Bill 939, the Proposed Project would include a Construction Recycling Plan and Waste Recycling Report that identifies and estimates materials to be recycled during construction activities. The Riverside County Department of Waste Resources would review Proposed Project plans prior to issuance of building permits to ensure the solid waste and recycling collection and loading areas comply with the Design Guidelines for Refuse and Recyclables Collection and Loading Areas.
Goal 16	Adequate supplies of natural gas and electricity from utility purveyors and the availability of communications services shall be provided within the March JPA Planning Area.	Consistent. As discussed in Section 3.5, Energy, of this EIR, the supply of natural gas and electricity would be sufficient for consumption by the Proposed Project during construction and operation phases. As discussed in Section 3.14, Utilities and Service Systems, of this EIR, there are existing telecommunication systems near the project site that would serve the Proposed Project. The Proposed Project would connect to the electricity and telecommunications services lines at the existing power poles located near the eastern boundary of the project site. The Proposed Project would connect to the existing natural gas service lines that run north-south across the project site.
Goal 17	Adequate flood control facilities shall be provided prior to, or concurrent with, development in order to protect the lives and property within the March JPA Planning Area.	Consistent. As discussed in Section 3.9, Hydrology and Water Quality, of this EIR, a backbone storm drain would be installed beneath the project site to connect existing culverts within the airfield to a storm drain south of the project site, to maintain airfield drainage patterns. Two on-site subsurface detention basins with approximately 91,300 cu ft capacity and associated on-site storm drain infrastructure would be installed to capture on-site flows. The on-site storm drain network would provide storage for required runoff treatment prior to discharge to the backbone storm drain system at an allowable discharge rate. The proposed backbone storm drain

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		system would carry flows south, consistent with existing drainage patterns.
Policy 17.1	Provide for the adequate drainage of storm runoff to protect the lives and property within the Planning Area.	Consistent. See response to Land Use Element Goal 17, above.
Policy 17.3	Require new development to construct new or upgrade existing drainage facilities to accommodate the additional storm runoff caused by the development.	Consistent. See response to Land Use Element Goal 17, above.
Policy 17.4	Require all storm drain and flood control facilities to be approved and operational prior to the issuance of certificates of occupancy for the associated development.	Consistent. Prior to issuance of certificates of occupancy, Riverside County Flood Control District will inspect and approve the required storm drains and flood control facilities.
Policy 17.7	Seek to preserve drainage courses in their natural condition, while providing adequate safety and protection of property.	Consistent. As discussed in Section 3.9, Hydrology and Water Quality, under existing conditions, the project site has relatively little impervious surface and collects stormwater runoff from off-site areas to the west and northwest of the site and from on-site areas into two earthen drainage channels and one concrete V-ditch, all three of which convey flows to a 36-inch-diameter culvert located at the southern boundary of the project site (Figures 3.9-1a and 3.9-1b). To meet the goals of capturing and treating runoff and maximizing opportunities to mimic natural hydrology, the Project-Specific WQMP indicates that impervious surfaces were minimized to the maximum extent feasible (while still meeting the Proposed Project’s goals and objectives), including preservation of a portion of the Site 7 remediation area (i.e., the burn area) in an undisturbed state (Appendix K-2). Appropriate permit(s) from the federal, state, regional, and local permitting agencies would be obtained to address the on-site drainage and protect persons and property.

Transportation Element

Goal 2	Build and maintain a transportation system which capitalizes on the multi-faceted elements of transportation planning and systems, designed to meet the needs of the planning area while minimizing negative effects on air quality, the environment and adjacent land uses and jurisdictions.	Consistent. Circulation improvements for the Proposed Project would be limited to on-site circulation, expansion of the existing access roadway south of the project site, and construction of the signalized intersection at Heacock St. and the existing access roadway. The Proposed Project would be responsible for its fair-share contribution for all improvements necessary to ensure study area intersections operate at LOS D or better (PDF-TRA-1).
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Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 2.1	March JPA shall balance the need for free traffic flow with economic realities and environmental and aesthetic consideration, such that transportation facilities are capable of normal patterns and volume, with tolerance of peak and high level usage with minimal disruption, delays or impacts.	Consistent. See response to Transportation Element Goal 2, above.
Policy 2.6	FAA standards, military AICUZ, and appropriate Comprehensive Land Use Plan for March Airfield shall be upheld and supported to encourage and realize a safe environment in and around the aviation field.	Consistent. The project site overlaps the Clear Zone (CZ) and Accident Potential Zone (APZ) I (March ARB 2018), located south of the Runway 12-30 alignment; however, the cargo building is proposed outside of these zone boundaries. The Riverside County ALUCP identifies the project site as Zone B2, High Noise Zone. The Proposed Project would undergo ALUC review to demonstrate the proposed development is consistent with the ALUCP criteria for Zone B2 prior to approval of the Proposed Project. Consistency with Zone B2 criteria would ensure that the Proposed Project would not conflict with existing airfield operations.
Policy 2.7	On-street parking shall be de-emphasized throughout the planning area to permit maximum capacity of roadways to be actuated by vehicular and bicycle transportation modes.	Consistent. The March JPA Development Code requires a minimum of 121 parking stalls for the Proposed Project. A total of 122 parking spaces would be provided within the project site to serve the cargo building. As such, the on-site parking would meet or exceed the minimum off-street requirements and prevent spillover onto the adjacent street system.
Goal 3	Develop a transportation system that is safe, convenient, efficient and provides adequate capacity to meet local and regional demands.	Consistent. Circulation improvements for the Proposed Project would be limited to on-site circulation, expansion of the existing access roadway south of the project site, and construction of the signalized intersection at Heacock St. and the existing access roadway. The Proposed Project would be responsible for its fair-share contribution for all improvements necessary to ensure study area intersections operate at LOS D or better (PDF-TRA-1).
Policy 3.5	Driveway entrances onto surrounding arterial highways, major and minor arterial streets should be restricted when practical, and through traffic on interior streets should be minimized.	Consistent. Proposed Project access would be provided by a signalized intersection at Heacock St. and the existing access roadway south of the project site. The expanded access roadway and internal circulation would be designed and constructed according to March JPA standards and under the direction of a licensed and qualified civil engineer.
Goal 4	Provide a balanced transportation system that ensures the safe and efficient movement of people and goods throughout the	Consistent. The Proposed Project includes development of an air cargo center that can utilize existing infrastructure at the MIP Airport within the March ARB. In addition to the proposed cargo building, the Proposed Project would expand the existing tarmac to allow for improved access to the existing taxiway for

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
	planning area, while minimizing the use of land for transportation facilities.	the Proposed Project and existing airport users south of the project site.
Policy 4.3	Arterial roads should carry both local and through traffic and be planned and improved to maintain a Level of Service “D” or better with limiting circumstances of Level of Service “E” to occur.	Consistent. Circulation improvements for the Proposed Project would be limited to on-site circulation, expansion of the existing access roadway south of the project site, and construction of the signalized intersection at Heacock St. and the existing access roadway. A detailed analysis of the study area intersection deficiencies is included below this table for various scenarios. The Proposed Project would be responsible for its fair-share contribution for all improvements necessary to ensure study area intersections operate at LOS D or better (PDF-TRA-1).
Policy 4.4	Through traffic planning, measures should be implemented to alleviate direct impacts to adjoining jurisdictions which decrease roadway function Level of Service below the jurisdiction’s adopted accepted Level of Service, as appropriate.	Consistent. The assignment of traffic from the project site to the adjoining roadway system is based on the Proposed Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Proposed Project. A detailed analysis of the study area intersection deficiencies is included below this table for various scenarios. The Proposed Project would be responsible for its fair-share contribution for all improvements necessary to ensure study area intersections operate at LOS D or better (PDF-TRA-1).
Policy 4.5	Require the dedication and improvement of arterial roadways prior to the issuance of certificates of occupancy.	Consistent. Off-site transportation improvements associated with the Proposed Project would be limited to development of a signalized intersection for site access and lane improvements at Heacock St. and the existing access roadway.
Goal 6	Establish vehicular access control policies in order to maintain and insure the effectiveness and capacity of arterial roadways.	Consistent. Circulation improvements for the Proposed Project would be limited to on-site circulation, expansion of the existing access roadway south of the project site, and construction of the signalized intersection at Heacock St. and the existing access roadway. A detailed analysis of the study area intersection deficiencies is included below this table for various scenarios. The Proposed Project would be responsible for its fair-share contribution for all improvements necessary to ensure study area intersections operate at LOS D or better (PDF-TRA-1).
Policy 6.1	To the extent possible, access shall be provided on local or collector streets where the frontage is available on both local and arterials streets.	Consistent. Vehicles would access the project site via the expanded access roadway off of Heacock St., which is a designated truck route between Krameria Ave. and San Michele Rd. to the south. Proposed Project access would be provided by a signalized intersection at Heacock St. and the existing access roadway south of the project site. The expanded access roadway would be designed and constructed according to March JPA standards and under the direction of a licensed and qualified civil engineer. The project site driveway would be constructed to a width of 50 feet to accommodate large trucks and trailers.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 6.2	Access to an arterial road shall be limited to one point for every 300 feet of frontage or one point for parcels with less than 300 feet of frontage.	Consistent. A single driveway would be developed for the project site, with access to the existing access roadway off of Heacock St.
Goal 9	Develop measures which will reduce the number of vehicle-miles travelled during peak travel periods.	Consistent. The Proposed Project would develop an employment-generating land use, similar to existing permitted land uses in the vicinity. Development of the Proposed Project would provide new job opportunities to residents in the region, improving the jobs/housing balance. The Proposed Project would reduce commutes to large urban centers such as Los Angeles or Orange County and reduce VMT associated with longer commutes as discussed in Section 3.12, Transportation, of this EIR.
Policy 9.2	Provide preferential parking for carpools and vanpools, where appropriate.	Consistent. Through implementation of MM-AQ-4 (Commute Trip Reduction), 5% of vehicle/employee parking within the project site would be reserved as preferential spaces for carpools and vanpools.
Goal 10	Regulate the travel of trucks on March JPA Planning Area streets.	Consistent. Regional truck access to the project site would be from I-215 at Harley Knox Blvd. Trucks would follow the designated truck route, traveling north on Heacock St. to the intersection with the expanded access roadway to access the project site. Trucks leaving the project site would use the expanded access roadway to turn south on Heacock St. to follow the designated truck route back to I-215.
Policy 10.1	Establish a truck route system which designates truck commercial vehicle routes and provides adequately sized and designated roadways to meet the needs of trucks and commercial vehicles. This will eliminate truck and commercial vehicle traffic through inappropriate areas of the March JPA Planning Area.	Consistent. See response to Transportation Goal 10, above.
Goal 11	Adequate off-street parking for all land uses shall be provided which requires adequate on-site parking to prevent spill over on the adjacent street system.	Consistent. The March JPA Development Code requires a minimum of 121 parking stalls for the Proposed Project. A total of 122 parking spaces would be provided within the project site to serve the cargo building. As such, the on-site parking would meet or exceed the minimum off-street requirements and prevent spillover onto the adjacent street system. The Proposed Project would also have 31 dock loading positions and 37 trailer storage positions.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Goal 13	Promote, preserve and protect the joint use of the aviation field by the Air Force Reserves and civilian aviation.	Consistent. The Proposed Project includes development of an air cargo center that can utilize existing infrastructure at the MIP Airport within the March ARB. In addition to the proposed cargo building, the Proposed Project would expand the existing tarmac to allow for improved access to the existing taxiway for the Proposed Project and existing airport users south of the project site. New civilian flight operations associated with the Proposed Project would not result in exceedance of currently permitted civilian air operations capacity under the Joint Use Agreement.
Goal 15	In accordance with state and federal law, promote and provide mobility for the disabled.	Consistent. The Proposed Project would comply with all applicable ADA requirements as required by federal and state law.
Policy 15.1	Require that all development comply with the requirements of the state and federal law for the disabled. Requirements may include ramps at street corners, access to public buildings, traffic signal timing and the like.	Consistent. The Proposed Project would comply with all applicable ADA requirements as required by federal and state law.
Noise/Air Quality Element		
Goal 1	Ensure that land uses are protected from excessive and unwanted noise.	Consistent. As discussed in Section 3.11, Noise, of this EIR, the Proposed Project would include MM-NOI-1 (Construction Worker Hearing Protection), which would ensure all occupants within the cargo building would not be exposed to excessive noise levels. MM-NOI-2 (Future Tenant Aircraft Fleet) would ensure any future aircraft mix would not exceed the noise levels disclosed in this EIR.
Policy 1.1	Establish acceptable limits of noise for various land uses throughout the March JPA Planning Area. Future development that could increase ambient noise levels shall be required to mitigate the anticipated noise increase, to the extent possible.	Consistent. The Proposed Project would be directly south and east of March ARB. Based on the Riverside County ALUCP noise level contours of the March ARB/Inland Port Airport, the project site is located in the B2 High Noise Zone, which represents areas of high noise and a moderate accident potential risk. The project site is located within the 60 to 70 dBA CNEL noise level contour boundaries of March ARB/Inland Port Airport. Based on the AICUZ noise level contours, the Proposed Project represents a compatible land use (Table 6-2 of the 2018 AICUZ) as discussed in Section 3.11, Noise, of this EIR.
Policy 1.2	Noise sensitive uses (such as schools, libraries, hospitals, medical facilities, residential uses, etc.) shall be discouraged in areas where	Consistent. The Proposed Project does not include any noise sensitive land uses. Based on the AICUZ noise level contours, the Proposed Project represents a compatible land use (Table 6-2 of the 2018 AICUZ) as discussed in Section 3.11, Noise, of this EIR.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
	noise levels exceed acceptable limits.	
Policy 1.3	Encourage good acoustical design in new construction.	Consistent. As discussed in Section 3.11, Noise, of this EIR, the Proposed Project would include MM-NOI-1 (Construction Worker Hearing Protection), which would ensure all occupants within the cargo building would not be exposed to excessive noise levels.
Policy 1.4	Provide buffer areas between noise sources and other developments, where practical.	Consistent. The project site is surrounded by land uses with similar noise profiles.
Goal 2	Minimize incompatible noise level exposures throughout the Planning Area, and where possible, mitigate the effect of noise incompatibilities to provide a safe and healthy environment.	Consistent. The Proposed Project would be directly south and east of March ARB. Based on the Riverside County ALUCP noise level contours of the March ARB/Inland Port Airport, the project site is located in the B2 High Noise Zone, which represents areas of high noise and a moderate accident potential risk. The project site is located within the 60 to 70 dBA CNEL noise level contour boundaries of March ARB/Inland Port Airport. Based on the AICUZ noise level contours, the Proposed Project represents a compatible land use (Table 6-2 of the 2018 AICUZ) as discussed in Section 3.11, Noise, of this EIR.
Policy 2.2	Noise Generating facilities shall be located in areas with compatible noise generating land uses (i.e., airport noise contour areas) to minimize land use incompatibilities, noise abatement and mitigation measures needed.	Consistent. The Proposed Project would be directly south and east of March ARB, with industrial development to the south and west. Based on the Riverside County ALUCP noise level contours of the March ARB/Inland Port Airport, the project site is located in the B2 High Noise Zone, which represents areas of high noise and a moderate accident potential risk. The project site is located within the 60 to 70 dBA CNEL noise level contour boundaries of March ARB/Inland Port Airport. Based on the AICUZ noise level contours, the Proposed Project represents a compatible land use (Table 6-2 of the 2018 AICUZ).
Policy 2.4	March JPA shall evaluate noise sensitivity and noise generation when considering land use projects and transportation improvement projects, and where appropriate mitigation measures shall be employed.	Consistent. As discussed in Section 3.11, Noise, of this EIR, the Proposed Project would include MM-NOI-1 (Construction Worker Hearing Protection), which would ensure all occupants within the cargo building would not be exposed to excessive noise levels. MM-NOI-2 (Future Tenant Aircraft Fleet) would ensure any future aircraft mix would not exceed the noise levels disclosed in this EIR.
Policy 2.5	March JPA shall utilize and comply with Caltrans standards for noise compatibility for aviation generated noise to proposed land use development.	Consistent. Under the Caltrans standards, the Proposed Project is not an incompatible land use (21 CCR 5014). See response to Noise Element Policy 2.2, above.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Goal 3	Work toward the reduction of noise impacts from vehicular traffic, and aviation and rail operations.	Consistent. As discussed in Section 3.11, Noise, of this EIR, the Proposed Project would include MM-NOI-1 (Construction Worker Hearing Protection), which would ensure all occupants within the cargo building would not be exposed to excessive noise levels. MM-NOI-2 (Future Tenant Aircraft Fleet) would ensure any future aircraft mix would not exceed the noise levels disclosed in this EIR.
Policy 3.1	Include mitigating measures such as landscaping, berming, and site orientation, in the design of projects located near noise generating sources such as arterial roadways.	Consistent. As discussed in Section 3.11, Noise, of this EIR, the Proposed Project would include MM-NOI-1 , which would ensure all occupants within the cargo building would not be exposed to excessive noise levels.
Policy 3.3	Adhere to the adopted AICUZ and Comprehensive Land Use Plan standards and promote the use of newer and quieter aircraft and support equipment.	Consistent. The project site overlaps the Clear Zone (CZ) and Accident Potential Zone (APZ) I (March ARB 2018), located south of the Runway 12-30 alignment; however, the cargo building is proposed outside of these zone boundaries. The Riverside County ALUCP identifies the project site as Zone B2, High Noise Zone. The Proposed Project would undergo ALUC review to demonstrate the proposed development is consistent with the ALUCP criteria for Zone B2 prior to approval of the Proposed Project. Consistency with Zone B2 criteria would ensure that the Proposed Project would not conflict with existing airfield operations.
Policy 3.4	Where appropriate, noise mitigation measures shall be incorporated in the design and approval of development on property adjacent to the aviation and rail facilities.	Consistent. See response to Noise Element Policy 3.1, above.
Policy 3.5	Where appropriate, development in areas adjacent to freeways, arterial streets, and other noise source shall be designed to reduce the potential for noise impacts.	Consistent. See response to Noise Element Policy 3.1, above.
Policy 3.6	Regulate the use of local streets by trucks, trailers, and construction vehicles, to the extent possible.	Consistent. Regional access to the Proposed Project would be provided via I-215 at Harley Knox Blvd., with local access for trucks, trailers, and construction vehicles provided via Heacock St. to the south, consistent with designated truck routes. Proposed Project construction would comply with March JPA Development Code Section 9.10.030(2) for temporary construction noise.
Policy 3.7	Limit trucking operations to appropriate routes, times and speeds.	Consistent. Regional access to the Proposed Project would be provided via I-215 at Harley Knox Blvd., with local access for trucks, trailers, and construction vehicles provided via Heacock

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		St. to the south, consistent with designated truck routes. Proposed Project operation would comply with March JPA Development Code Section 9.10.140, Noise and Sound.
Policy 3.8	Appropriate muffling systems for construction equipment and operations shall be required, as necessary.	Consistent. MM-AQ-1 requires all construction equipment be tuned and maintained in accordance with the manufacturer’s specifications. Proposed Project operation would comply with March JPA Development Code Section 9.10.140, Noise and Sound.
Policy 3.9	March JPA shall encourage and facilitate the use of mass transit services and alternative transportation systems to minimize dependence of the automobile within the Planning Area, thereby minimizing the level of noise generated by surface transportation.	Consistent. MM-AQ-2 requires the annual provision of information to employees and truck drivers about electric vehicle charging availability and alternate transportation opportunities for commuting. MM-AQ-4 requires any tenant agreement to include 5% reserved parking spaces for carpools and vanpools, provision of short- and long-term bicycling parking facilities and ‘end-of-trip’ facilities, onsite food vending or kitchen equipment and mail facilities, and establishment of rideshare program with financial incentives.
Goal 2	Reduce emissions associated with vehicle miles traveled by enhancing the jobs/housing balance of the subregion of western Riverside County.	Consistent. The Proposed Project proposes an employment-generating land use, similar to existing permitted land uses in the vicinity. Development of the Proposed Project would provide new job opportunities to residents in the region, improving the jobs/housing balance. The Proposed Project would reduce commutes to large urban centers such as Los Angeles or Orange County and reduce VMT associated with longer commutes as discussed in Section 3.12, Transportation, of this EIR.
Goal 3	Reduce air pollution through proper land use, transportation, and energy use planning.	Consistent. The Proposed Project includes development of an air cargo center that can utilize existing infrastructure at the MIP Airport within the March ARB. In addition to the proposed cargo building, the Proposed Project would expand the existing tarmac to allow for improved access to the existing taxiway for the Proposed Project and existing airport users south of the project site. The Proposed Project would provide new job opportunities to residents in the region, improving the jobs/housing balance, and would reduce commutes to large urban centers such as Los Angeles or Orange County and reduce VMT associated with longer commutes as discussed in Section 3.12, Transportation, of this EIR.
Policy 3.4	Encourage ride share programs.	Consistent. The project would comply with this policy through implementation of MM-AQ-4, which would provide preferential parking spaces for carpools and vanpools and establish a rideshare program with financial incentives.
Goal 4	Pursue reduced emissions for stationary and mobile sources through the use and	Consistent. The Proposed Project would comply with the latest version of the California Energy Efficient Standards for Residential and Non-Residential Buildings. In addition, the Proposed Project would implement the following mitigation

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
	implementation of new and advancing technologies.	measures to further increase energy efficiency and reduce water use: <ul style="list-style-type: none"> ▪ MM-AQ-2 (Improved Energy Efficiency and Water Reduction) ▪ MM-AQ-3 (Truck Requirements) ▪ MM-AQ-5 (Additional Air Quality Tenant Requirements) ▪ MM-GHG-1 (Installation of EV Charging Stations)
Policy 4.1	Pursue the use of equipment with reduced or zero emissions for stationary and mobile source equipment.	Consistent. See response to Air Quality Element Goal 4, above. The referenced mitigation measures include requirements related to the use of equipment with reduced or zero emissions.
Policy 4.4	Promote for all development and encourage end-users to employ emission reducing or zero source equipment and processes.	Consistent. See response to Air Quality Element Goal 4, above. The referenced mitigation measures include requirements related to the use of emission reducing or zero source equipment and processes.
Policy 5.5	Review development project to determine potential air quality impacts and provide appropriate mitigation, where necessary.	Consistent. A comprehensive air quality analysis for the Proposed Project is included within Section 3.2, Air Quality, of this EIR, including applicable regulations and mitigation measures required to reduce air emissions generation by the Proposed Project. The Proposed Project would implement MM-AQ-1 through MM-AQ-6 .
Goal 6	Reduce emissions associated with vehicle/engine use.	Consistent. During construction, the contractor would ensure that off-road diesel equipment complies with EPA/CARB Tier 4 emissions standards, through implementation of MM-AQ-1 (Construction Management Plan). MM-AQ-2 requires all heavy-duty trucks hauling onto the project site to be model year 2014 or later; specifies the use of electric-powered hand tools, forklifts, and pressure washers, to the extent feasible, along with a designated charging area; and limits construction equipment idling to no longer than 3 minutes. During operation, MM-AQ-3 requires the annual provision of information to employees and truck drivers about electric vehicle charging availability, alternate transportation opportunities for commuting, the Voluntary Interindustry Commerce Solutions “Empty Miles” program to improve goods trucking efficiencies, and efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. MM-AQ-4 limits truck idling to 3 minutes and requires that all heavy-duty trucks (Class 7 and 8) domiciled at the Project site be model year 2014 or later from start of operations, and shall expedite a transition to zero-emission vehicles (ZEVs), with the fleet fully zero-emission by December 31, 2030, or when commercially available for the intended application, whichever date is later. MM-AQ-5 requires any tenant agreement to include 5% reserved parking spaces for carpools and vanpools, provision of short- and long-term bicycling parking facilities and ‘end-of-trip’ facilities, onsite food vending or kitchen equipment and mail facilities,

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		<p>and establishment of rideshare program with financial incentives. MM-AQ-6 requires the tenant to utilize a “clean fleet” of vehicles/delivery vans/trucks (Class 2 through 6) as part of business operations as follows: For any vehicle (Class 2 through 6) domiciled at the project site, the following “clean fleet” requirements apply: (i) 33% of the fleet will be ZEVs at start of operations, (ii) 65% of the fleet will be ZEVs vehicles by December 31, 2026, (iii) 80% of the fleet will be ZEVs by December 31, 2028, and (iv) 100% of the fleet will be ZEVs by December 31, 2030. MM-GHG-1 requires that the Project include the circuitry, capacity, and equipment for EV charging stations in accordance with Tier 2 of the 2022 CALGreen Code.</p> <p>Once operational, the Proposed Project would provide new job opportunities to residents in the region, improving the jobs/housing balance. The Proposed Project would reduce commutes to large urban centers such as Los Angeles or Orange County and reduce VMT associated with longer commutes.</p>
Policy 6.1	Reduce idling emissions by increasing traffic flow through synchronized traffic signals.	Consistent. The signal will be synchronized with other signals on Heacock Street.
Policy 6.3	Encourage diversion of peak hour truck traffic, whenever feasible, to off-peak periods to reduce roadway congestion and associated emissions.	Consistent. MM-AQ-3 requires the annual provision of information to employees and truck drivers about electric vehicle charging availability, alternate transportation opportunities for commuting, the Voluntary Interindustry Commerce Solutions “Empty Miles” program to improve goods trucking efficiencies, and efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
Policy 6.4	Work with Caltrans (California Department of Transportation) and traffic engineers to ensure that roadways and freeway on-ramps that are heavily utilized by trucks are designed to safely accommodate trucks.	Consistent. As discussed in Section 3.12, Transportation, of this EIR, truck routes within the March JPA planning area are designated to ensure that truck and commercial vehicle routes are adequately sized to meet the needs of such trucks and to eliminate truck and commercial traffic within areas not suited for such vehicles. Additionally, a queuing analysis was prepared to evaluate potential impacts to off-ramps at I-215 and found that at the I-215 southbound ramps at Harley Knox, none of the queues are reported to spill back onto I-215 or add two or more car lengths to the ramp queues in the peak hours that would extend into the freeway mainline per Caltrans criteria.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 6.5	Encourage trucks operating within March JPA Planning Area to maintain safety equipment and operate at safe speeds so as to reduce the potential for accidents which create congestion and related emissions.	Consistent. Truck routes within the March JPA planning area are designed to ensure that truck and commercial vehicle routes are adequately sized to meet the needs of such trucks and to eliminate truck and commercial traffic within areas not suited for such vehicles. MM-TRA-2 requires any leasing agreement for the Proposed Project require that all Proposed Project truck traffic utilize the Harley Knox Boulevard interchange at I-215 and the designated truck routes to the south of the project site. MM-TRA-2 further requires the intersection improvements at Heacock Street include installed signage directing trucks to the Harley Knox Boulevard interchange.
Policy 6.6	Reduce vehicle emissions through improved parking design and management that provide for safe pedestrian access to and from various facilities.	Consistent. As discussed in Section 3.12, Transportation, of this EIR, the proposed expansion to the existing access roadway, site driveway, internal circulation, and parking would be designed and constructed according to March JPA standards, which provides for safe pedestrian access.
Policy 6.8	Encourage the use of compressed natural gas, clean diesel, and/or alternative fuels in engines.	Consistent. See response to Air Quality Element Goal 6, above.
Goal 7	Reduce emissions associated with energy consumption.	Consistent. See response to Air Quality Element Goal 6, above.
Policy 7.1	Support the use of energy-efficient equipment and design in the March JPA Planning Area for facilities and infrastructure.	Consistent. See response to Air Quality Element Goal 6, above.
Policy 7.2	Encourage incorporation of energy conservation features in development.	Consistent. The Proposed Project would include the following design elements through implementation of MM-AQ-3 : installation of Energy-Star certified light bulbs and fixtures, installation of insulation to a minimum level of and modestly enhanced window insulation, construction of modest cool roof; defined as CRRC Rated 0.15 aged solar reflectance and 0.75 thermal emittance, use of HVAC equipment with a Seasonal Energy Efficiency Ratio (SEER) rating of 14 or higher; installation of water heaters with an energy factor of 0.92 or higher; all rooms would have some form of daylighting (i.e., skylights or windows); at least 50% of artificial lighting fixtures would be high efficiency; waterless urinals and high efficiency toilets would be used throughout the Proposed Project; water-efficient faucets would be used throughout the Proposed Project; provide electrical outlets in exterior areas; install a non-potable water irrigation system; and install water-efficient landscaping. MM-GHG-1 requires that the Project include the circuitry, capacity, and equipment for EV charging stations in accordance with Tier 2 of the 2022 CALGreen Code. Due to the

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		project site’s proximity to March ARB, solar panels are not feasible.
Policy 7.3	Support passive solar design in new construction.	Consistent. The project would comply with this policy through implementation of MM-AQ-3 , which would reduce heating and cooling loads through energy-efficiency strategies.
Policy 7.4	Support recycling programs which reduce emissions associated with manufacturing and waste disposal.	Consistent. The Proposed Project would comply with the Countywide Integrated Waste Management Plan, and in accordance with Assembly Bill 939, the Proposed Project would include a Construction Recycling Plan and Waste Recycling Report that identifies and estimates materials to be recycled during construction activities. The Riverside County Department of Waste Resources would review Proposed Project plans prior to issuance of building permits to ensure the solid waste and recycling collection and loading areas comply with the Design Guidelines for Refuse and Recyclables Collection and Loading Areas.
Policy 7.5	Support drought-resistant vegetation in landscaping areas to reduce energy needed to pump water.	Consistent. Landscaping proposed within on-site parking areas would comply with the state of California Model Water Efficiency Ordinance (March JPA Development Code Chapter 9.17), which promotes landscaping practices that integrate conservation and efficient use of water.
Goal 8	Reduce air pollution emissions and impacts through siting and building design.	Consistent. During construction, the contractor would ensure that off-road diesel equipment complies with EPA/CARB Tier 4 emissions standards, through implementation of MM-AQ-1 (Construction Management Plan). During operation, implementation of MM-AQ-5 would encourage commute trip reduction and would require reserved carpool/van pool parking and bicycle facilities within the project site to support alternative modes of transportation, and MM-AQ-4 would require loading docks to be designed to accommodate SmartWay trucks. Once operational, the Proposed Project would provide new job opportunities to residents in the region, improving the jobs/housing balance. The Proposed Project would reduce commutes to large urban centers such as Los Angeles or Orange County and reduce VMT associated with longer commutes.
Policy 8.1	Support the use of low polluting construction materials and coatings.	Consistent. During construction, the contractor would ensure that off-road diesel equipment complies with EPA/CARB Tier 4 emissions standards, through implementation of MM-AQ-1 . MM-AQ-2 requires that the Proposed Project utilize “Super-Compliant” low volatile organic compound (VOC) paints that have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD’s Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the applicant may utilize tilt-up concrete buildings that do not require the use of architectural coatings

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 8.3	Encourage the separation of sensitive receptors from potential carbon monoxide hotspots.	Consistent. The project site is not located in the vicinity of sensitive receptors such as schools, hospitals, and residences. Also, as discussed in Section 3.2, Air Quality, of this EIR, the Proposed Project would not result in a CO hotspot.
Goal 9	Reduce fugitive dust and particulate matter emissions.	Consistent. MM-AQ-2 requires that all heavy-duty trucks hauling onto the project site be model year 2014 or later; specifies the use of electric-powered hand tools, forklifts, and pressure washers, to the extent feasible, along with a designated charging area; limits grading to 20 acres per day; and limits construction equipment idling to no longer than 3 minutes. The Proposed Project would comply with all applicable SCAQMD rules, including: <ul style="list-style-type: none"> ▪ Rule 401: Reduce visible emissions. ▪ Rule 402: Prohibit “nuisance” discharge of air pollutants. ▪ Rule 403: Contain visible fugitive dust on site.
Policy 9.1	Require all feasible fugitive dust reduction techniques to be utilized during construction activities.	Consistent. See response to Air Quality Element Goal 9, above.
Policy 9.3	Support land division design which minimizes grading and maintains the natural topography to the maximum extent feasible.	Consistent. See response to Air Quality Element Goal 9, above. The Proposed Project is an infill project on relatively flat land. The Proposed Project is not anticipated to have excessive grading associated with it and the existing topography will be maintained.
Resource Management Element		
Goal 1	Conserve and protect surface water, groundwater, and imported water resources	Consistent. Potable water would be supplied by WMWD. Water sources from WMWD primarily depend on imported water resources. WMWD purchases both Colorado River and State Water Project water from Metropolitan. The Proposed Project does not propose any groundwater extraction from the underlying aquifer. As discussed in Section 3.9, Hydrology and Water Quality, of this EIR, a backbone storm drain would be installed beneath the project site to connect two existing culverts within the airfield to the storm drain south of the project site, to maintain existing airfield drainage patterns. Two on-site subsurface detention basins and associated on-site storm drain infrastructure would be installed to capture on-site flows. The on-site storm drain network would provide storage for required runoff treatment prior to discharge to the backbone storm drain system at an allowable discharge rate. The proposed backbone storm drain system would carry flows south, consistent with existing drainage patterns.
Policy 1.1	Where possible, retain local drainage courses, channels and creeks in their natural condition.	Consistent. No natural drainages exist on site. Surface drainage currently enters the project site from the north and flows south to existing storm drain infrastructure south of the project site. As discussed in Section 3.9, Hydrology and Water

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		<p>Quality, of this EIR, a backbone storm drain would be installed beneath the project site to connect two existing culverts within the airfield to the storm drain south of the project site, to maintain existing airfield drainage patterns. Two on-site subsurface detention basins and associated on-site storm drain infrastructure would be installed to capture on-site flows. The on-site storm drain network would provide storage for required runoff treatment prior to discharge to the backbone storm drain system at an allowable discharge rate. The proposed backbone storm drain system would carry flows south, consistent with existing drainage patterns. The surface drainage system for the site connects with the Heyborne ditch south.</p>
Policy 1.2	Protect groundwater and surface water resources from depletion and sources of pollution.	<p>Consistent. See response to Resource Management Element Goal 1, above.</p> <p>The Proposed Project does not propose any groundwater extraction from the underlying aquifer, would not result in a water demand from WMWD that would appreciably deplete its overall water supplies, and the Proposed Project would use water-efficient devices and landscaping to reduce water consumption. The Proposed Project would be required to comply with the ND PES Construction General Permit, including implementation of a SWPPP, to avoid impacts of stormwater discharges during construction. A WQMP would be implemented during operational activities to ensure stormwater runoff from the project site is managed to protect water sources downstream, utilizing LID stormwater design features and BMPs.</p>
Policy 1.4	Require development to conserve water resources, including the use of water-efficient plumbing fixtures and irrigation systems.	<p>Consistent. Low water-use plumbing fixtures and irrigation systems would be installed as part of the Proposed Project, pursuant to Section 5.303 of the 2022 California Green Building Code. The Proposed Project would comply with the most current version of CALGreen effective at the time the Proposed Project is constructed.</p>
Policy 1.5	Conserve imported water by requiring water conservation techniques, water-conserving and recycling processes, drought-resistant landscaping, and reclaimed water for irrigation, when available and appropriate.	<p>Consistent. Landscaping proposed within on-site parking areas would comply with the state of California Model Water Efficiency Ordinance (March JPA Development Code Chapter 9.17), which promotes landscaping practices that integrate conservation and efficient use of water.</p>
Policy 1.6	Promote the use of drought tolerant landscaping in development, and encourage the use of reclaimed water for irrigation, when available and appropriate.	<p>Consistent. Landscaping proposed within on-site parking areas would comply with the state of California Model Water Efficiency Ordinance (March JPA Development Code Chapter 9.17), which promotes landscaping practices that integrate conservation and efficient use of water.</p>

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 1.8	Assure that development projects comply with regulatory agency requirements, including federal, state, and regional regulations.	Consistent. The Proposed Project would be required to comply with the NDPES Construction General Permit, including implementation of a SWPPP, to avoid impacts of stormwater discharges during construction. A WQMP would be implemented during operational activities to ensure stormwater runoff from the project site is managed to protect water sources downstream, utilizing LID stormwater design features and BMPs.
Goal 2	Control flooding to reduce major losses of life and property	Consistent. As discussed in Section 3.9, Hydrology and Water Quality, of this EIR, implementation of (1) the SWPPP in conformance with the NDPES Construction General Permit, (2) the WQMP in compliance with the NPDES Guidelines for New Development & Redevelopment for Projects under the March Joint Powers Authority, and (3) proposed drainage design pursuant to the Riverside County Flood Control & Water Conservation District Hydrology Manual collectively ensure that Proposed Project impacts due to flooding would be less than significant.
Policy 2.3	Ensure that development does not divert storm water runoff onto adjacent properties, or cause alterations of natural drainage courses that cannot be adequately handled by flood control improvements coincident with the development	Consistent. Surface drainage currently enters the project site from the north and flows south to existing storm drain infrastructure south of the project site. As discussed in Section 3.9, Hydrology and Water Quality, of this EIR, a backbone storm drain would be installed beneath the project site to connect two existing culverts within the airfield to the storm drain south of the project site, to maintain existing airfield drainage patterns.
Goal 3	Conserve and protect significant land forms, important watershed areas, mineral resources, and soil conditions.	Consistent. The Proposed Project does not propose any alterations to significant land forms, important watershed areas or mineral resources. The Proposed Project would be required to comply with the NDPES Construction General Permit, including implementation of a SWPPP, to avoid impacts of stormwater discharges during construction. A WQMP would be implemented during operational activities to ensure stormwater runoff from the project site is managed to protect water sources downstream, utilizing LID stormwater design features and BMPs.
Policy 3.5	Require and practice proper soil management techniques to reduce erosion, sedimentation and other soil-related problems.	Consistent. See response to Resource Management Element Goal 3, above.
Policy 3.6	Control erosion during and following construction through proper grading techniques, vegetation replanting, and the installation of proper drainage control improvements.	Consistent. See response to Resource Management Element Goal 3, above.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 3.7	Require erosion control measures such as binders, revegetation, slope covers, and other practices which reduce soil erosion due to wind and water.	Consistent. See response to Resource Management Element Goal 3, above.
Goal 4	Conserve energy resources through use of availability energy technology and conservation practices.	Consistent. During construction, the contractor would ensure that off-road diesel equipment complies with EPA/CARB Tier 4 emissions standards, through implementation of MM-AQ-1 (Construction Management Plan). MM-AQ-2 requires that all heavy-duty trucks hauling onto the project site be model year 2014 or later; specifies the use of electric-powered hand tools, forklifts, and pressure washers, to the extent feasible, along with a designated charging area; and limits construction equipment idling to no longer than 3 minutes. During operation, MM-AQ-3 requires the annual provision of information to employees and truck drivers about electric vehicle charging availability, alternate transportation opportunities for commuting, the Voluntary Interindustry Commerce Solutions “Empty Miles” program to improve goods trucking efficiencies, and efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. MM-AQ-4 limits truck idling to 3 minutes and requires that all heavy-duty trucks (Class 7 and 8) domiciled at the Project site be model year 2014 or later from start of operations, and shall expedite a transition to zero-emission vehicles, with the fleet fully zero-emission by December 31, 2030, or when commercially available for the intended application, whichever date is later. MM-AQ-5 requires any tenant agreement to include 5% reserved parking spaces for carpools and vanpools, provision of short- and long-term bicycling parking facilities and ‘end-of-trip’ facilities, on-site food vending or kitchen equipment and mail facilities, and establishment of rideshare program with financial incentives. MM-AQ-6 requires the tenant to utilize a “clean fleet” of vehicles/delivery vans/trucks (Class 2 through 6) as part of business operations as follows: For any vehicle (Class 2 through 6) domiciled at the project site, the following “clean fleet” requirements apply: (i) 33% of the fleet will be ZEVs at start of operations, (ii) 65% of the fleet will be ZEVs by December 31, 2026, (iii) 80% of the fleet will be ZEVs by December 31, 2028, and (iv) 100% of the fleet will be ZEVs by December 31, 2030. MM-GHG-1 requires that the Project include the circuitry, capacity, and equipment for EV charging stations in accordance with Tier 2 of the 2022 CALGreen Code.
Policy 4.1	Implement energy performance requirements established under the California Administration	Consistent. CALGreen applies to all new construction and any new installations or retrofits on existing structures. As such, the air quality modeling conducted for the Proposed Project assumes compliance with Title 24 regulations. CALGreen is

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
	Code Title 24 Energy Conservation and Insulation Regulations.	updated on a regular basis, with the most recently approved update consisting of the 2022 CALGreen, effective January 1, 2023. The Proposed Project would comply with the most current version of CALGreen effective at the time the Proposed Project is constructed.
Policy 4.3	Encourage the use and development of alternative and innovative energy resources and energy conservation techniques, where practical.	Consistent. See response to Resource Management Element Goal 4, above.
Goal 5	Conserve and protect significant stands of mature trees, native vegetation, and habitat within the planning area.	<p>Consistent. A comprehensive analysis of potential impacts to biological resources is included in Section 3.3, Biological Resources, of this EIR, including findings of the BTR (Appendix D) and Aquatic Resources Delineation Report (Appendix E to Appendix D) prepared for the project site.</p> <p>The project area supports habitat that could be used by San Diego black-tailed jackrabbit, which has been documented on the project site, and California glossy snake. Impacts would be reduced with implementation of MM-BIO-2 (Best Management Practices) and MM-BIO-3 (San Diego Black-Tailed Jackrabbit Avoidance and Minimization Measures).</p> <p>The project area supports habitat that could be used by birds for nesting. Implementation of MM-BIO-4 (Nesting Bird Avoidance and Minimization Measures) requires nesting bird surveys of Proposed Project impact areas prior to construction.</p> <p>Impacts to 0.02 acres of Goodding’s willow–red willow riparian woodland and forest and 0.10 acres of wetland waters of the United States would be mitigated to a less-than-significant level through implementation of MM-BIO-5 (Jurisdictional Waters Permitting and Regulatory Agency Permitting), which requires compensatory mitigation for impacts to Goodding’s willow–red willow riparian woodland and forest and wetland waters.</p> <p>The project area does not contain planted street trees or native oak trees.</p>
Policy 5.1	Where practical, conserve important plant communities and habitats such as riparian areas, wetlands, significant tree stands, and species by using buffers, creative site planning, revegetation and open space easements/dedications.	Consistent. The project area does not contain planted street trees or native oak trees. Impacts to 0.02 acres of Goodding’s willow–red willow riparian woodland and forest and 0.10 acres of wetland waters of the United States would be mitigated to a less-than-significant level through implementation of MM-BIO-5 , which requires compensatory mitigation for impacts to Goodding’s willow–red willow riparian woodland and forest and wetland waters (refer to Section 3.3, Biological Resources, of this EIR).

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 5.2	Encourage the planting of native species of trees and other drought-tolerant vegetation.	Consistent. Landscaping proposed within on-site parking areas would comply with the state of California Model Water Efficiency Ordinance (March JPA Development Code Chapter 9.17), which promotes landscaping practices that integrate conservation and efficient use of water. Section 9.17.030(B) requires the use of native species and other drought-tolerant vegetation. In addition, implementation of MM-AQ-3 would ensure further landscape water efficiency.
Policy 5.4	In areas that may contain important plant and animal communities, require development to prepare biological assessments identifying species types and locations and develop measures to preserve recognized sensitive species, as appropriate.	Consistent. A comprehensive analysis of potential impacts to biological resources is included in Section 3.3, Biological Resources, of this EIR, including findings of the BTR (Appendix D) and Aquatic Resources Delineation Report (Appendix E to Appendix D) prepared for the project site. MM-BIO-1A (Burrowing Owl Avoidance and Minimization Measures), MM-BIO-1B (Burrowing Owl Relocation and Mitigation Plan), MM-BIO-2 , MM-BIO-3 , MM-BIO-4 , and MM-BIO-5 were developed to preserve recognized sensitive species (San Diego black-tailed jackrabbit and California glossy snake) as well as burrowing owls and other birds.
Policy 5.5	Where practical, allow development to remove only the minimum natural vegetation and encourage the revegetation of graded areas with native plant species.	Consistent. See response to Resource Management Element Goal 5, above.
Policy 7.5	Require development proposals that are located on or near archaeological or paleontological resources to provide a cultural resources study that assesses potential impacts to the resource as a result of the proposed development. The report will include measures to avoid destruction of any significant cultural resources.	Consistent. A historic resources study was conducted for the project area (Appendix E). The Proposed Project would have no impact on known historical and archaeological resources within the project site and vicinity. Implementation of MM-CUL-2 and MM-CUL-3 would minimize potential impacts associated with inadvertent discovery of archaeological resources and human remains during ground-disturbing construction activities, respectively. In addition, a paleontological resources report, including a paleontological records search, was conducted for the project area (Appendix I). The Proposed Project would have no impact on known paleontological resources within the project site and vicinity. Implementation of MM-GEO-1 (Paleontological Monitoring Program) would reduce potential impacts associated with inadvertent discovery of paleontological resources during ground-disturbing activities.
Policy 7.6	Require the preservation of identified cultural resources to the extent possible, prior to development, through dedication, removal, transfer, reuse, or other means.	Consistent. The Proposed Project would have no impact on known historical and archaeological resources within the project site and vicinity. Implementation of MM-CUL-2 would minimize potential impacts associated with inadvertent discovery of archaeological resources during ground-disturbing construction activities.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Safety/Risk Management Element		
Goal 1	Minimize injury and loss of life, property damage, and other impacts caused by seismic shaking, fault rupture, ground failure, and landslides.	Consistent. The project site has potential for strong seismic ground shaking due to proximity to active faults. Design and construction of the proposed cargo building would be required to comply with the UBC and CBC to ensure structural integrity. In addition, as detailed in Section 3.6, Geology and Soils, of this EIR, recommendations included within the Geotechnical Exploration Report prepared for the project site (Appendix H) would be incorporated during Proposed Project design and construction.
Policy 1.1	Require geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and development review process. Require mitigation of seismic or geologic hazards to the satisfaction of the responsible agencies.	Consistent. See response to Safety/Risk Management Element Goal 1, above.
Policy 1.2	Ensure all grading plans comply with the Uniform Building Code and California Building Code including, if necessary, requiring preliminary investigations of development sites by a State-registered geotechnical engineers and certified engineering geologists.	Consistent. See response to Safety/Risk Management Element Goal 1, above.
Policy 1.3	If necessary, require liquefaction assessment studies in any area identified as having moderate to high liquefaction susceptibility.	Not Applicable. As discussed in Section 3.6, Geology and Soils, of this EIR, Riverside County Geologic Hazards maps indicate that the site is not located in a zone of high liquefaction potential (Appendix H). Although groundwater was encountered in soil borings at a depth of approximately 20 feet and 14.5 feet below ground surface within the project site, liquefaction-induced or dynamic dry settlement is not expected to be a significant hazard at this site due to the absence of near-surface saturated sand layers and underlying dense older alluvium and granitic bedrock.
Goal 3	Minimize injury, loss of life, property damage, and economic and social disruption caused by flood hazards.	Consistent. As discussed in Section 3.9, Hydrology and Water Quality, of this EIR, implementation of (1) the SWPPP in conformance with the NDPES Construction General Permit, (2) the WQMP in compliance with the <i>NPDES Guidelines for New Development & Redevelopment for Projects under the March Joint Powers Authority</i> , and (3) proposed drainage design pursuant to the <i>Riverside County Flood Control & Water Conservation District Hydrology Manual</i> collectively ensure

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		that Proposed Project impacts due to flooding would be less than significant.
Policy 3.4	Ensure that development does not divert stormwater runoff onto adjacent properties, or cause alterations of natural drainage courses that cannot be adequately handled by existing drainage facilities or the flood control improvements proposed with the development.	Consistent. The Proposed Project is designed to provide adequate drainage of anticipated storm runoff. Surface drainage currently enters the project site from the north and flows south to existing storm drain infrastructure south of the project site. As discussed in Section 3.9, Hydrology and Water Quality, of this EIR, a backbone storm drain would be installed beneath the project site to connect two existing culverts within the airfield to the storm drain south of the project site, to maintain existing airfield drainage patterns. On-site subsurface detention basins with approximately 91,300 cu ft capacity and associated on-site storm drain infrastructure would be installed to capture on-site flows. The on-site storm drain network would provide storage for required runoff treatment prior to discharge to the backbone storm drain system at an allowable discharge rate. The proposed backbone storm drain system would carry flows south, consistent with existing drainage patterns.
Policy 3.5	Require the installation and maintenance of storm drains by property owners.	Consistent. As discussed in Section 3.9, Hydrology and Water Quality, of this EIR, a backbone storm drain would be installed beneath the project site to connect two existing culverts within the airfield to the storm drain south of the project site, to maintain existing airfield drainage patterns. On-site subsurface detention basins with approximately 91,300 cu ft capacity and associated on-site storm drain infrastructure would be installed to capture on-site flows. Implementation of the WQMP in compliance with the <i>NPDES Guidelines for New Development & Redevelopment for Projects under the March Joint Powers Authority</i> would include BMPs for proper installation and maintenance to ensure adequate on-site drainage and treatment of stormwater.
Policy 3.6	Assess potential environmental drainage impacts of new construction, including the necessity and impact of Riverside County Flood Control and Water Conservation District drains and privately-owned and operated storm drains adjacent to slopes and stream-bed areas.	Consistent. See response to Safety/Risk Management Element Policy 3.4, above.
Policy 3.7	Utilize and support storm drain maintenance efforts to prevent localized flooding and mud and debris flows from overtaxed storm drains during strong storms.	Consistent. See response to Safety/Risk Management Element Policy 3.4, above.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
Policy 4.1	Ensure that law enforcement and fire services, such as fire equipment and response time, are adequate and able to respond to a major disaster.	<p>Consistent. With the nearby services of Station 65–Kennedy Park, as well as other nearby City of Moreno Valley and Riverside County fire stations, the Proposed Project would be served by sufficient fire protection services. RCFD ensures that new development complies with the California Fire Code (24 CCR, Part 9). The proposed cargo building would be required to install fire prevention devices, such as fire alarms and sprinklers, to improve emergency-related problems for the proposed development. Zoned sprinkler systems would be installed throughout the building.</p> <p>The Proposed Project may result in increased need for police services, such as enforcement calls and emergency responses. None of these increases, however, would trigger the need for new or improved facilities in order to meet the additional demand as no new population is expected per City of Moreno Valley Police Department. Any additional personnel (officers, supervisors, or support staff), equipment, and vehicles necessary could be accommodated at existing facilities. In addition, the Proposed Project would pay the applicable criminal justice public facilities DIF to support future expansion of police facilities.</p>
Policy 4.5	Ensure that new access roads have adequate widths and turning radius for fire and emergency vehicles.	<p>Consistent. All areas of the project site would be accessible to emergency responders during both Proposed Project construction and operation. Vehicles would access the project site via the expanded access roadway at its signalized intersection with Heacock St. The main access point, along with the internal drive aisles and other on-site circulation design features, would provide emergency responders access to the entirety of the site.</p>
Policy 4.6	Coordinate with the Riverside County Fire Department to support the development of adequate water supplies for emergency fire flow needs in an emergency, including on-site supplies of water, supplementary gravity-fed 1 water tanks, and auxiliary water distribution systems.	<p>Consistent. As part of standard development practices, prior to construction, Proposed Project plans would be reviewed by RCFD, and the Proposed Project would be required to incorporate RCFD’s recommendations into the final Proposed Project design. The Proposed Project would coordinate with RCFD to support the development of adequate water supplies for emergency fire flow during an emergency.</p>
Goal 5	Reduce the potential for hazardous material exposure or contamination in the Planning Area.	<p>Consistent. The project site is located within Riverside County ALUCP Compatibility Zone B2. The March ARB/Inland Port ALUCP (2014) and the March ARB AICUZ Study (2018) impose restrictions and limitations on the types and quantities of uses and hazardous materials that can be stored on sites within the B2 zone. As discussed in Section 3.8, Hazards and Hazardous Materials, of this EIR, any hazardous materials used on site would be stored, treated, and disposed of in accordance with state and federal law. MM-HAZ-1 (Hazardous Materials Contingency Plan) and MM-HAZ-2 (Stop Work, Groundwater</p>

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
		Management) would also be implemented to ensure hazardous materials would be properly handled, stored, treated, and disposed of.
Policy 5.1	Comply with the enforcement of disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify such materials at the site, and to notify the appropriate County, State and/or Federal agencies in the event of a violation.	Consistent. See response to Safety/Risk Management Element Goal 5, above.
Policy 5.3	Ensure the storage, use and transportation of any hazardous material complies with the standards set forth within the errata sheets published for each substance.	Consistent. See response to Safety/Risk Management Element Goal 5, above.
Policy 7.2	Ensure development and use of property within the vicinity of the airfield complies with appropriate building standards and codes, including height restrictions, restrictions on use, setbacks, population densities, insulation and materials, as contained within an approved Comprehensive Land use Plan and appropriate AICUZ.	<p>Consistent. The project site overlaps the Clear Zone (CZ) and Accident Potential Zone (APZ) I (March ARB 2018), located south of the Runway 12-30 alignment; however, the cargo building is proposed outside of these zone boundaries. The Riverside County ALUCP identifies the project site as Zone B2, High Noise Zone. The Proposed Project would undergo ALUC review to demonstrate the proposed development is consistent with the ALUCP criteria for Zone B2 prior to approval of the Proposed Project. Based on review of the March ARB/Inland Port ALUCP, it is anticipated that the Proposed Project would be consistent with Zone B2 criteria and therefore would not conflict with existing airfield operations.</p> <p>Additionally, the Proposed Project would be developed in accordance with the March JPA Development Code that would ensure the Proposed Project meets the setback requirements, height restrictions, site and building design, site orientation, etc. that would be compatible with adjacent and surrounding land uses.</p> <p>An FAA Form 7460-1 application to FAA for an Obstruction Evaluation/Airport Airspace Analysis would be submitted to ensure the Proposed Project would not create obstructions to air navigation.</p>
Environmental Justice Element^a		
Health Risk Reduction		
HC 16.5*	Evaluate the compatibility of unhealthy and polluting land uses being located near	Consistent. North of the project site is March ARB. To the east of the project site is the Site 7 Area, followed by Heacock Street and existing warehouse operations. To the west of the

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
	sensitive receptors including possible impacts on ingress, egress, and access routes. Similarly, encourage sensitive receptors, such as housing, schools, hospitals, clinics, and childcare facilities to be located away from uses that pose potential hazards to human health and safety.	project site is the existing airport tarmac/taxiway within March ARB, followed by I-215. To the south of the project site are the existing warehouse operations associated with the KRIV-Amazon and Hanes/DDI cargo storage and distribution facilities. The nearest residential area is located approximately 0.5 miles to the east. This EIR includes an evaluation of the Proposed Project's impacts to sensitive receptors, such as residences and schools.
HC 16.14*	Assure that sensitive receptors are separated and protected from polluting point sources, as feasible, including agricultural businesses that produce or use pesticides and chemical fertilizers.	Consistent. The nearest residential area is located approximately 0.5 miles to the east. This EIR evaluates the Proposed Project's impacts to sensitive receptors in Section 3.2, Air Quality, and includes MM-AQ-1 through MM-AQ-6 to reduce air emissions to the maximum extent feasible.
HC 16.15*	Assure that site plan design protects people and land, particularly sensitive land uses such as housing and schools, from air pollution and other externalities associated with industrial and warehouse development through the use of barriers, distance, or similar solutions or measures from emission sources when possible.	Consistent. The nearest residential area is located approximately 0.5 miles to the east. The project site is surrounded by industrial development and March ARB. To protect people and land, a 14-foot-high fence compliant with Department of Defense regulations and requirements would be installed along the project site's northern boundary. Along the project site's southern boundary and along the site access roadway, a 10-foot-tall steel tube fence would be installed. A 12-foot-tall concrete masonry unit wall would be installed in the interior of the site to separate Site 7 from areas within the project site accessible to trucks and employees.
HC 16.16*	Apply pollution control measures such as landscaping, vegetation, and green zones (in cooperation with the SCAQMD) and other materials, which trap particulate matter or control air pollution.	Consistent. Landscaping would include two areas of non-native hydroseed totaling 137,381 square feet (refer to Figure 2-9, Landscape Plan). As required by Chapter 9.17 of the March JPA Development Code (March JPA 2016) and the recommendations in the Wildlife Hazard Review prepared for the Proposed Project (Appendix J-3), the native hydroseed mix would consist of a drought-tolerant native grass and forb mix, specifically small fescue (<i>Festuca microstachys</i>).
HC 16.18*	Promote new development that emphasizes job creation and reduction in vehicle miles traveled in job-poor areas and does not otherwise contribute to onsite emissions in order to improve air quality.	Consistent. The Proposed Project would provide new job opportunities to residents in the region and maintain the jobs/housing balance. The Proposed Project would reduce commutes to surrounding areas and reduce VMT associated with longer commutes.
HC 16.23*	Discourage industrial and agricultural uses which produce significant quantities of toxic emissions into the air, soil, and groundwater to	Consistent. The Proposed Project does not propose any agricultural uses that would produce significant quantities of toxic emissions. With regard to industrial uses, MM-AQ-1 through MM-AQ-6 are included to reduce identified air quality impacts.

Table 3.10-1. Proposed Project Consistency with March JPA General Plan

Goal/Policy Number	Goal or Policy	Consistency Analysis
	prevent the contamination of these physical environments.	
HC 16.24*	Ensure compatibility between industrial development and agricultural uses and adjacent land uses. To achieve compatibility, industrial development and agricultural uses will be required to include criteria addressing noise, land, traffic and greenhouse gas emissions to avoid or minimize creating adverse conditions for adjacent communities.	Consistent. The project site is surrounded by industrial development and March ARB. The nearest residential area is located approximately 0.5 miles to the east. This EIR includes mitigation measures to address noise (MM-NOI-1 and MM-NOI-2), traffic (MM-TRA-1 and MM-TRA-2), air quality (MM-AQ-1 through MM-AQ-6), and GHG emissions (MM-GHG-1).

Safe and Sanitary Home Policies

HC 18.7*	Discourage industrial, agricultural and other land uses that may pollute and cause health conflicts with residential land uses either directly or indirectly. Ensure that community members are properly notified and involved in the decision-making process for new land use proposals.	Consistent. See responses to Environmental Justice Element policies HC 16.5, 16.23, and 16.24, above. Community members will have the opportunity to review and comment on this EIR and provide comments on the Proposed Project to March JPA.
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Notes: MIP = March Inland Port; ARB = Air Reserve Base; ALUCP = Airport Land Use Compatibility Plan; JPA = Joint Powers Authority; AFB = Air Force Base; I = Interstate; AICUZ = Air Installation Compatible Use Zones; EIR = Environmental Impact Report; dBA = A-weighted decibels; CNEL = community noise equivalent level; PDF = Project Design Feature; DIF = development impact fee; ALUC = Airport Land Use Commission; Caltrans = California Department of Transportation; FAA = Federal Aviation Administration; MM = Mitigation Measure; WMWD = Western Municipal Water District; EMWD = Eastern Municipal Water District; RWQCB = Regional Water Quality Control Board; cu ft = cubic feet; LOS = level of service; VMT = vehicle miles traveled; ADA = Americans with Disabilities Act; L_{eq} = energy equivalent level; CAP = Climate Action Plan; EPA = U.S. Environmental Protection Agency; CARB = California Air Resources Board; TUMF = transportation uniform mitigation fee; HVAC = heating, ventilation, and air conditioning; EV = electric vehicle; SCAQMD = South Coast Air Quality Management District; Metropolitan = Metropolitan Water District of Southern California; SWPPP = stormwater pollution prevention plan; WQMP = water quality management plan; LID = low-impact development; BMP = best management practice; CALGreen = Title 24 California Green Building Standards Code; BTR = Biological Technical Report; UBC = Uniform Building Code; CBC = California Building Code; NPDES = National Pollutant Discharge Elimination System; RCFD = Riverside County Fire Department; EJ = Environmental Justice.

^a The March JPA Environmental Justice Element was modeled after the County of Riverside’s policies. Similar to the County of Riverside, March JPA Environmental Justice policies with an asterisk next to them (*) are those that apply to development projects. As such, the consistency analysis focuses on those policies relevant to the Proposed Project.

As shown in Table 3.10-1, the Proposed Project would be generally consistent with the goals and policies identified in the March JPA General Plan and the Environmental Justice Element. Where appropriate, mitigation measures are included to reduce and/or avoid potential conflicts with applicable goals adopted for the purpose of avoiding or mitigating an environmental effect. As such, impacts related to Proposed Project consistency with the March JPA General Plan would be **less than significant with mitigation incorporated**.

March JPA Development Code Consistency

Less-Than-Significant Impact. The Proposed Project would involve processing a zoning designation of Aviation (A) for the 34-acre Air Cargo Center Component, which would be consistent with the existing General Plan designation of AV for this portion of the project site. No zoning designations or revisions are requested as part of the Off-Site Component; thus, the March JPA Development Code would not be applicable to the Off-Site Component. Table 3.10-2 demonstrates the Proposed Project’s compliance with March JPA’s Development Code.

Table 3.10-2. Proposed Project Compliance with March JPA Development Standards

Development Standards	Required/Permitted	Project Provided
Industrial Site Standards		
Site area	1 acre min.	34 acres
Lot dimensions		
Lot width	200 feet min.	Approx. 1,120 feet
Lot depth	200 feet min.	Approx. 900 feet
Building height	45 feet max. ^a	45 feet
Building Setbacks		
Front	20 feet	Approx. 160 feet
Side (interior)	3 feet	Approx. 50 feet
Side (street side)	20 feet	Approx. 160 feet
Rear	3 feet	Approx. 900 feet
Parking Requirements		
Air Cargo Building		
9,000 sf office (3.3 spaces per 1 ksf)	30 stalls	122 stalls
0-50,000 sf (1 space per 1 ksf)	50 stalls	
50,000-200,000 sf (0.33 spaces per 1 ksf)	41 stalls	
Total Parking	121 stalls required	122 stalls provided

Source: March JPA 2016.

Notes: sf= square feet; ksf= thousand square feet.

^a Greater height allowed subject to Administrative Variance (Development Code Section 9.02.090).

As shown in Table 3.10-2, the Proposed Project would comply with the March JPA Development Code Standards. Therefore, the Proposed Project would be consistent with the March JPA Development Code, and impacts would be **less than significant**.

March ARB/Inland Port Airport Land Use Compatibility Plan Consistency

Less-Than-Significant Impact with Mitigation Incorporated. The purpose of the March ARB/Inland Port ALUCP is to promote compatibility between March ARB/Inland Port Airport and the land uses that surround the joint-use airport, to the extent such areas are not already devoted to incompatible uses. The March ARB/Inland Port ALUCP regulates future development of new residential dwellings, commercial

structures, and other noise- or risk-sensitive uses within the Airport Influence Area based on factors enumerated in the ALUCP, including but not limited to noise, overflight, safety, and airspace protection. The project site is subject to compliance with the March ARB/Inland Port ALUCP (Riverside County ALUC 2014). As identified in the ALUCP, the project site is located in the B2 Zone, High Noise Zone for the March ARB/Inland Port Airport. The B2 Zone is subject to high noise and a moderate accident potential risk (Riverside County ALUC 2014). The land uses prohibited within the B2 Zone include new dwellings, children’s schools, daycare centers, libraries, hospitals, congregate care facilities, hotels/motels, places of assembly, buildings with more than three aboveground habitable floors, noise-sensitive outdoor nonresidential uses, critical community infrastructure facilities, and hazards to flight (Riverside County ALUC 2014). Within the B2 Zone, aboveground bulk storage of hazardous materials is discouraged, and air space review is required for objects greater than 35 feet in height.

Building Height Compatibility

The proposed cargo building would have a maximum building height of 45 feet, which would require an airspace review because the height exceeds 35 feet. To ensure the cargo building is designed pursuant to the height restriction criteria in 14 CFR Section 77.17, the project applicant would be required to submit an FAA Form 7460-1 application to FAA for an Obstruction Evaluation/Airport Airspace Analysis to ensure the Proposed Project would not create obstructions to air navigation. FAA reviews the application and issues a hazard determination. The ALUC considers the complete application including the FAA hazard determination, as part of the Proposed Project’s consistency review. Based on review of the ALUCP it is anticipated that the Proposed Project would demonstrate consistency with the ALUCP and would therefore be approved by the ALUC. Once the ALUC approves of the Proposed Project, the relevant permits have been issued, and the building has been constructed, FAA Form 7460-2 would be completed by the project applicant or their designee and e-filed with FAA within 5 days after construction of the Proposed Project reaches its greatest height. Impacts relating to building height compatibility would be **less than significant**.

Aircraft Noise Compatibility

As identified in the ALUCP (Riverside County ALUC 2014), parts of the project site are within the 60 to 70 dBA CNEL aircraft noise contours for the Proposed Project. Because the proposed land uses are not considered sensitive to noise and considering typical anticipated building construction noise attenuation of approximately 20 decibels (dB) (Riverside County ALUC 2014), the occupants within the proposed cargo building would thus be exposed to aircraft noise levels between 40 and 50 dBA CNEL. Noise levels up to 75 dBA CNEL are normally acceptable at industrial/manufacturing land uses and noise levels up to 70 dBA CNEL are normally acceptable at commercial/office land uses within the March JPA jurisdiction (March JPA 1999a). Implementation of **Mitigation Measure (MM) NOI-1** (Construction Worker Hearing Protection; refer to Section 3.11.6 for complete measure) requires that the applicant shall provide evidence that the Proposed Project plans contain the requirements and restrictions with respect to personal protective equipment (PPE) and noise hazard information for onsite construction workers. Implementation of **MM-NOI-2** (Future Tenant Aircraft Fleet; refer to Section 3.11.6 for complete measure) requires documentation of tenant’s aircraft fleet noise emissions to confirm impacts identified in this EIR. As such, occupants within the proposed cargo building would not be exposed to significant aircraft-generated noise. Thus, it is anticipated that the Proposed Project would be consistent with the aircraft noise compatibility requirements of the ALUCP; impacts would be **less than significant with mitigation incorporated**.

Land Use Intensity Compatibility

Average Intensity. The Proposed Project includes an approximately 180,800-square-foot cargo building. The California Building Code identifies the occupancy rate for Aircraft Hangars and Industrial Uses as one person per 500 square feet. Based on this occupancy rate, the Proposed Project has the potential to accommodate 362 people. It is anticipated that the Proposed Project would employ up to 150 individuals. Thus, even assuming all anticipated employees were on site, the anticipated occupancy rate of the Proposed Project would not exceed the allowable the Compatibility Zone B2 average acre threshold of 100 people per acre.

Total Occupancy Based on Parking. Using the parking spaces method for determining total occupancy, the number of parking spaces is multiplied by the average vehicle occupancy (ALUC assumes average vehicle occupancy to be 1.5 persons per vehicle and 1.0 persons per truck trailer parking). The Proposed Project would include 122 automobile parking spaces and 37 truck trailer stalls. Based on these persons-per-vehicle rates, the Proposed Project would result in an estimated 220 people. This would result in an average intensity of approximately 7 people per acre, which would be consistent with the Compatibility Zone B2 criterion of 100 people per acre.

Single-Acre Maximum Intensity. Using the Aircraft Hangars and Industrial Uses occupancy rate of one person per 500 square feet of building space, within 1 acre of building (43,560 square feet) the Proposed Project could accommodate 87.1 people,⁴ which is consistent with single-acre criterion of 250 people per acre.

Although land use intensities analyzed herein conclude that the Proposed Project would be consistent with the maximum land use intensity thresholds established for Zone B2, the ALUC will conduct land use intensity estimates themselves during ALUC review. As such, implementation of **MM-LU-1** (Occupancy Limits; refer to Section 3.10.5 for complete measure) would ensure that the Proposed Project complies with permitted land use intensities within Zone B2.

Therefore, the Proposed Project would be consistent with the March ARB/Inland Port ALUCP, and impacts would be **less than significant with mitigation incorporated**.

March Air Reserve Base AICUZ Consistency

Less-Than-Significant Impact. The project site is subject to compliance with the 2018 AICUZ Study (March ARB 2018), which recommends noise levels, Clear Zones (CZs), Accident Potential Zones (APZs), and flight clearance requirements associated with military airfield operations, to ensure compatibility with surrounding land uses.

The project site is located within the CNEL 60 dBA to 70 dBA noise contour level (Figure 3.11-12). Industrial land uses are considered compatible for noise contours less than 80 dBA CNEL (March ARB 2018). As such, the Proposed Project land uses would be consistent with the established AICUZ noise contours.

The project site overlaps the CZ and APZ I (March ARB 2018), located south of the Runway 12-30 alignment. To minimize the likelihood of aviation accidents, the cargo building is proposed outside the CZ and APZ I. As such, the Proposed Project would be consistent with the established AICUZ CZs and APZs.

⁴ 43,560 square feet/500 square feet = 87.1 people.

The project site is within the designated Approach/Departure Clearance imaginary surface, where height restrictions apply to ensure the existing flight paths are free of obstructions. To ensure the Proposed Project is designed pursuant to height restriction criteria of 14 CFR Section 77.17, the project applicant would be required to submit an FAA Form 7460-1 application to FAA for an Obstruction Evaluation/Airport Airspace Analysis to ensure the Proposed Project would not create obstructions to air navigation. Within 5 days after construction of the Proposed Project reaches its greatest height, FAA Form 7460-2 would be completed by the project applicant or his/her designee and e-filed with FAA. Therefore, the Proposed Project would be consistent with the March ARB AICUZ, and adverse impacts would be **less than significant**.

Stephens' Kangaroo Rat Habitat Conservation Plan Consistency

No Impact. Under the Stephens' Kangaroo Rat HCP (RCHCA 1996), development within the HCP boundaries but outside the core reserves is deemed to fully mitigate for any impacts to Stephens' kangaroo rat (*Dipodomys stephensi*) through compliance with the Stephens' Kangaroo Rat HCP and the payment of a fee to the Riverside County Habitat Conservation Agency. March JPA is not a permittee to the Stephens' Kangaroo Rat HCP; however, if a proposed project under March JPA oversight is anticipated to impact (include take of) Stephens' kangaroo rat, March JPA may contact the Riverside County Habitat Conservation Agency regarding obtaining a special agreement to participate in the Stephens' Kangaroo Rat HCP, which would include payment of mitigation fees.

The project site is physically located within the Stephens' Kangaroo Rat HCP area. However, March JPA is not a member agency in the HCP, and Stephens' kangaroo rat is not present on the project site based on the negative results of the protocol surveys conducted on the site. Although March JPA is not a Permittee in the HCP and is not required to be consistent with the HCP, the Proposed Project would not conflict with the provisions of the Stephens' Kangaroo Rat HCP. Because there would be no conflicts with the Stephens' Kangaroo Rat HCP as a result of the Proposed Project, **no impacts** would occur.

Western Riverside County Multiple Species Habitat Conservation Plan Consistency

No Impact. Under the Western Riverside MSHCP, the wildlife agencies have granted take authorization for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the Western Riverside County MSHCP conservation area, in exchange for the assembly and management of a coordinated Western Riverside County MSHCP conservation area. It allows the participating jurisdictions to authorize take of plant and wildlife species identified within the MSHCP area. The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife have authority to regulate the take of threatened, endangered, and rare species.

The project site is located within the boundaries of the Western Riverside County MSHCP. March JPA, which serves as the lead agency for the Proposed Project, is not a signatory to the MSHCP. As such, the Proposed Project would not be subject to MSHCP regulations, nor would it receive take authority granted under the MSHCP. Although not anticipated, if needed, March JPA could seek take coverage through the MSHCP Participating Special Entity process and convey that take to the project applicant. The activities of the Participating Special Entity must comply with the terms and requirements of the MSHCP permits, the MSHCP, and the Agreement with the Participating Special Entity. Participating Special Entities also contribute to the MSHCP through payment of a fee based on the type of proposed activity, which shall be applicable to all activities in the MSHCP area. Although March JPA is not a Permittee in the MSHCP and is not required to be consistent with the MSHCP, the Proposed Project would not conflict with the provisions

of the MSHCP. Because there would be no conflicts with the MSHCP as a result of the Proposed Project, **no impacts** would occur.

3.10.5 Mitigation Measures

MM-LU-1 Occupancy Limits. Prior to the issuance of a certificate of occupancy, the project applicant shall demonstrate, via an Airport Land Use Commission Condition of Approval, to the March Joint Powers Authority's satisfaction that the levels of human occupancy would not exceed the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan's maximum permissible average of 100 persons per acre or 250 persons per single acre.

The Proposed Project would also be required to implement the following mitigation measures to reduce potentially significant impacts:

Air quality measures (refer to Section 3.2.5 for the complete measures):

- **MM-AQ-1 (Construction Management Plan)**
- **MM-AQ-2 (Construction Requirements)**
- **MM-AQ-3 (Improved Energy Efficiency and Water Reduction)**
- **MM-AQ-4 (Truck Requirements)**
- **MM-AQ-5 (Commute Trip Reduction)**
- **MM-AQ-6 (Additional Air Quality Tenant Requirements)**

Biological resources measures (refer to Section 3.3.5 for the complete measures):

- **MM-BIO-1A (Burrowing Owl Avoidance and Minimization Measures)**
- **MM-BIO-1B (Burrowing Owl Relocation and Mitigation Plan)**
- **MM-BIO-2 (Best Management Practices)**
- **MM-BIO-3 (San Diego Black-Tailed Jackrabbit Avoidance and Minimization Measures)**
- **MM-BIO-4 (Nesting Bird Avoidance and Minimization Measures)**
- **MM-BIO-5 (Jurisdictional Waters Permitting and Regulatory Agency Permitting)**

Cultural resources measures (refer to Section 3.4.5 for the complete measures):

- **MM-CUL-2 (Inadvertent Discovery of Archaeological Resources)**
- **MM-CUL-3 (Inadvertent Discovery of Human Remains)**

A geology and soils measure (refer to Section 3.6.5 for the complete measure):

- **MM-GEO-1 (Paleontological Monitoring Program)**

A greenhouse gas emissions measure (refer to Section 3.7.5 for the complete measure):

- **MM-GHG-1 (Installation of EV Charging Stations)**

Hazards and hazardous materials measures (refer to Section 3.8.5 for the complete measures):

- **MM-HAZ-1 (Hazardous Materials Contingency Plan)**
- **MM-HAZ-2 (Stop Work, Groundwater Management)**

Noise measures (refer to Section 3.11.6 for the complete measures):

- **MM-NOI-1 (Construction Worker Hearing Protection)**
- **MM-NOI-2 (Future Tenant Aircraft Fleet)**

Transportation measures (refer to Section 3.12.6 for the complete measures):

- **MM-TRA-1 (Construction Traffic Management Plan)**
- **MM-TRA-2 (Project Truck Route on Heacock Street)**

3.10.6 Level of Significance after Mitigation

Impacts to land use and planning can be mitigated to less-than-significant levels by incorporating mitigation measures as described in Section 3.10.4, Impacts Analysis, and listed in Section 3.10.5. Therefore, no significant adverse impacts would remain after mitigation; impacts to land use and planning would be **less than significant with mitigation incorporated**.

3.10.7 Cumulative Effects

As discussed throughout this section, with incorporation of the mitigation measures as described in Section 3.10.4, the Proposed Project would not conflict with any applicable land use plan, policy, or regulation that would result in a significant environmental impact. However, for the Proposed Project to be consistent with the March JPA zoning designations, the project applicant has filed for a Zoning Designation and Plot Plan, as discussed in Section 2.5.1, Requested Approvals and Entitlements, of the EIR. The Proposed Project's consistency with applicable land use plans, policies, or regulations is demonstrated in Tables 3.10-1 and Table 3.10-2. The land use consistency analysis takes several factors into consideration. Overall, as shown in the consistency tables, with implementation of mitigation measures and approval of the proposed Zoning Designation, the Proposed Project would be consistent with or implement the relevant goals, policies, guidelines, and recommendations.

Although land use impacts tend to be localized in nature, and specific impacts are tied either directly or indirectly to the specific action, the Proposed Project may have the potential to combine with other past, present, or future projects to cause unintended land use impacts, such as by accommodating increased growth that may result in more intensive land uses. Therefore, the geographic extent for this cumulative analysis encompasses the jurisdictional areas identified in Table 3-1, Cumulative Projects. Development of the past, present and reasonably foreseeable future projects identified in the introduction to Chapter 3, Environmental Analysis, would result in further urbanization within the project area. All cumulative projects would be subject to similar plan consistency criteria as the Proposed Project, which would ensure compliance with existing applicable land use plans with jurisdiction over the projects' area. Any cumulative projects that propose amendments to the general plan or zoning ordinance, or require a specific plan, would be required to show that proposed uses would be consistent with applicable policies. Cumulative projects that exist outside March JPA's jurisdiction would be required to show consistency with relevant and applicable planning documents that govern each respective jurisdiction. Each jurisdiction would also be responsible for determining the appropriate public and infrastructure improvements required with the implementation of each project.

Therefore, the Proposed Project, when viewed in context with the cumulative development proposals, is not expected to result in adverse cumulative land use impacts. In addition, future development would comply with applicable development standards to prevent land use conflicts. Therefore, the Proposed Project's land use and planning impacts would be **less than cumulatively considerable with mitigation incorporated**.

3.10.8 Level of Service Analysis (Non-CEQA Analysis)

The TA (Appendix M-1) provides analysis of the Proposed Project's potential effects relative to General Plan consistency with the minimum acceptable level of service (LOS) policies used by the March JPA and the cities or agencies that have jurisdiction over each of the study intersections. Pursuant to California Public Resources Code Section 21099(b)(2) and CEQA Guidelines Section 15064.3(a), a project's effect on automobile delay is not considered a significant environmental effect. This discussion is for informational purposes.

Project Traffic and Operational Analysis

Each jurisdiction establishes the minimum acceptable LOS and associated definitions for intersection deficiencies. Six levels are typically defined, ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow. LOS D represents traffic conditions that are approaching unstable with tolerable speeds that are subject to considerable variation. Based on the minimum acceptable LOS for each study area jurisdiction described in the TA (Appendix M-1), the minimum LOS utilized for the purposes of this analysis is LOS D for all study area intersections, as required by March JPA General Plan Transportation Element Policy 4.3.

On September 27, 2013, Governor Brown signed SB 743, which mandates that alternative metrics for determining impacts relative to transportation be developed to replace the use of LOS in CEQA documents. In December 2018, the CEQA Guidelines were updated to add Section 15064.3, Determining the Significance of Transportation Impacts, which describes specific considerations for evaluating a project's transportation impacts using the vehicle miles traveled (VMT) methodology. This new methodology has been required to be used for projects since July 1, 2020. SB 743 "does not preclude the application of local general plan policies, zoning codes, conditions of approval, thresholds, or any other planning requirements pursuant to the police power or any other authority" (refer to California Public Resources Code Section 21099[b][4]). Even if a general plan contains an LOS standard and a project is found to exceed that standard, that conflict should not be analyzed under CEQA. CEQA is focused on planning conflicts that lead to environmental impacts (*The Highway 68 Coalition v. County of Monterey* [2017] 14 Cal.App.5th 883, 893-94). Automobile delay, on its own, is no longer an environmental impact under CEQA (see California Public Resources Code Section 21099[b][2]). As such, the Proposed Project's LOS and recommended improvements have been included in this analysis for informational purposes.

Traffic Conditions

The TA provides a detailed analysis of operational characteristics for the 8 roadway segments and 20 intersections in the study area (as shown in Table 1-2 and 1-1 of the TA [Appendix M-1], respectively) for the following scenarios: Existing (2020) Conditions, Existing plus Project, Opening Year (2026) Cumulative, Opening Year (2026) Cumulative with Project, Horizon Year (2045) Conditions, and Horizon Year (2045) with Project. For any operational deficiency noted in the TA, a fair share calculation for the Proposed Project has been determined and included in Table 1-4 of the TA (**PDF-TRA-1** [Payment of Fair-Share Cost]; see Section 3.12, Transportation, for the full text of this project design feature). The recommended improvements are not considered mitigation because automobile delay, on its

own, is no longer considered an environmental impact under CEQA. Although Project Design Features are already part of the Project, they will also be included as separate conditions of approval and included in the Mitigation Monitoring and Reporting Program (MMRP). March JPA will monitor compliance through the MMRP.

With the implementation of the improvement measures provided in Table 1-4 of the TA (Appendix M-1), all study area intersections meeting the jurisdictions' deficiency criteria are anticipated to operate at acceptable LOS under Horizon Year (2045) with Project traffic,⁵ with the exception of the following:

- No. 1: I-215 SB Ramps & Harley Knox Boulevard – LOS F AM and PM peak hours
- No. 2: I-215 NB Ramps & Harley Knox Boulevard – LOS F AM and PM peak hours
- No. 5: Heacock Street & Cactus Avenue (#5) – LOS F AM and PM peak hours
- No. 6: Heacock Street & Meyer Drive/John F. Kennedy Drive – LOS E AM peak hour; LOS F PM peak hour
- No. 8: Heacock Street & Iris Avenue – LOS F AM peak hour only
- No. 11: Heacock Street & Cardinal Avenue – LOS E PM peak hour only
- No. 12: Heacock Street & San Michele Road – LOS F AM and PM peak hours
- No. 13: Webster Avenue & Harley Knox Boulevard – LOS F AM and PM peak hours
- No. 14: Indian Avenue & San Michele Road – LOS F AM peak hour; LOS E PM peak hour
- No. 15: Indian Avenue & Nandina Avenue – LOS F AM and PM peak hours
- No. 16: Indian Avenue & Harley Knox Boulevard – LOS E AM peak hour; LOS F PM peak hour
- No. 17: Heacock Street & Nandina Avenue – LOS F AM and PM peak hours

Some intersections would operate at a deficient level (below LOS D, per March JPA General Plan Transportation Element Policy 4.3). Therefore, recommendations for improvements at each deficient study area intersection are provided in the TA (Appendix M-1).

Recommended Improvements

For all Study Area intersections to operate at an acceptable LOS, pursuant to the LOS standards established by each jurisdiction, the TA (Appendix M-1) includes several recommendations for improvements at each deficient Study Area intersection. Table 1-4 includes a summary of the recommended improvements for each analysis scenario assuming that the Heacock Street extension would not be constructed by 2045. Table 1-5 of the TA (Appendix M-1) includes a summary of the recommended improvements for each analysis scenario assuming that the Heacock Street extension would be constructed by 2045.

The Proposed Project's contributions toward deficient intersections would be fulfilled through fair-share contributions (**PDF-TRA-1**) and/or fees, such as the Riverside County Transportation Uniform Mitigation Fee and Measure A.⁶ Tables 1-4 and 1-5 in the TA (Appendix M-1) also summarize the applicable cost associated with each of the recommended improvements.

⁵ Deficiency criteria are outlined in Section 2.7 of the TA (Appendix M-1). Intersection Nos. 6, 7, 10, and 37 fall below the applicable agencies' deficiency criteria.

⁶ Measure A is a voter approved, half-cent sales tax that is designed to fund transportation projects.

3.10.9 References Cited

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- SCAG (Southern California Association of Governments). 2020. *Connect SoCal: 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy*. Proposed final. March 2020. Accessed June 19, 2020. <https://www.connectsocial.org/Documents/Proposed/pfConnectSoCal-Plan.pdf>.

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3.11 Noise

This section describes the existing noise conditions of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, evaluates potential impacts related to the implementation of the Proposed Project, and identifies mitigation measures required for the Proposed Project. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Meridian D-1 Gateway Aviation Center Noise Impact Analysis (Noise Analysis) prepared by Urban Crossroads in April 2023 (Appendix L-1)
- March Air Reserve Base (ARB) – Noise Technical Report for Proposed Project (Sleep Disturbance) prepared by BridgeNet for Mead & Hunt in May 2022 (Appendix L-2)
- Photographs of and Logged Data from Outdoor Ambient Sound Survey Location L5 (Appendix L-3)

Other sources consulted are listed in Section 3.11.9, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March Joint Powers Authority (JPA). The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March ARB. Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.11.1 Existing Conditions

Noise Characteristics

Simply defined, “noise” is unwanted sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Noise is measured on the basis of sound pressure level, with the basic unit known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. Table 3.11-1 presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

Table 3.11-1. Typical Noise Levels

Common Outdoor Activities	Common Indoor Activities	A-Weighted Sound Level (dBA)	Subjective Loudness	Effects of Noise
Threshold of pain		140	Intolerable or deafening	Hearing loss
Near jet engine		130		
		120		

Table 3.11-1. Typical Noise Levels

Common Outdoor Activities	Common Indoor Activities	A-Weighted Sound Level (dBA)	Subjective Loudness	Effects of Noise
Jet flyover at 300 m (1,000 ft)	Rock band	110		
Loud auto horn		100	Very noisy	
Gas lawnmower at 1 m (3 ft)		90		
Diesel truck at 15 m (50 ft) at 80 kph (50 mph)	Food blender at 1 m (3 ft)	80		Speech interference
Noisy urban area, daytime	Vacuum cleaner at 3 m (10 ft)	70	Loud	
Heavy traffic at 90 m (300 ft)	Normal speech at 1 m (3 ft)	60		Sleep disturbance
Quiet urban daytime	Large business office	50	Moderate	
Quiet urban nighttime	Theater, large conference room (background)	40		No effect
Quiet suburban nighttime	Library	30	Faint	
Quiet rural nighttime	Bedroom at night, concert hall (background)	20		
	Broadcast/recording studio	10	Very faint	
Lowest threshold of human hearing	Lowest threshold of human hearing	0		

Source: EPA 1974.

Notes: dBA = A-weighted decibels; m = meters; ft = feet.

Range of Noise

Because the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. Each interval of 10 dB indicates a sound energy 10 times greater than before, which is perceived by the human ear as being approximately twice as loud. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at 3 feet is approximately at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 100 feet, which can cause serious discomfort. Another important aspect of noise is the duration of the sound and the way it is distributed in time.

Noise Descriptors

Environmental noise descriptors are generally based on averages, rather than instantaneous noise levels. The most commonly used figure is the average sound level (L_{eq}), or energy equivalent level. Energy equivalent sound levels are not measured directly but are calculated from sound-pressure levels typically measured in dBA. L_{eq} represents a steady-state sound level containing the same total energy as a time-varying signal over a given sample period, and it is commonly used to describe the “average” noise levels within the environment.

To describe the time-varying character of environmental noise, the statistical or percentile noise descriptors L_{50} , L_{25} , L_8 , and L_2 are commonly used. The percentile noise descriptors are the noise levels equaled or exceeded during 50%, 25%, 8%, and 2%, respectively, of a stated time. Sound levels associated with the L_2 and L_8 typically describe transient or short-term events, while levels associated with the L_{50} describe the steady state (or median) noise

conditions. While the L_{50} describes the mean noise levels occurring 50% of the time, the L_{eq} accounts for the total energy (average) observed for the entire hour. Therefore, the L_{eq} noise descriptor is generally 1 to 2 dB higher than the L_{50} noise level. The maximum noise level that occurs during a given noise measurement period is denoted L_{max} , and the minimum level recorded in that period is denoted as L_{min} .

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the community noise equivalent level (CNEL), representing a composite 24-hour noise level, is used. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day and averaged over 24 hours. The time-of-day corrections require the addition of 5 dB to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 dB to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise-sensitive time periods during the evening and night hours when sound appears louder. Another 24-hour average, the day/night average sound level (expressed as L_{dn}), includes only the addition of 10 dB to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. Calculated values using the CNEL versus L_{dn} methods rarely vary by more than 1 dB, and these terms are therefore used interchangeably. CNEL (L_{dn}) does not represent the actual sound level heard at any time, but rather represents the total sound exposure. March JPA relies on the 24-hour CNEL level to assess land use compatibility with transportation-related noise sources.

Sound Propagation

When sound travels over a distance, it changes in level and frequency content; this change is referred to as propagation. The way noise reduces with distance depends on the factors described in the following subsections.

Geometric Spreading

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source (Caltrans 2013).

Ground Absorption

The propagation path of noise from a highway to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance (Caltrans 1995a). This approximation is usually sufficiently accurate for distances closer than 200 feet. For acoustically hard sites (e.g., sites with a reflective surface between the source and the receiver, such as a parking lot), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (e.g., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source, and an overall drop-off rate of 7.5 dB per doubling of distance from a point source.

Atmospheric Effects

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., greater than 500 feet) due to atmospheric temperature inversion (e.g., increasing temperature with elevation). Other factors, such as air temperature, humidity, and turbulence, can also have significant effects.

Shielding

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line of sight to a nearby residence. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide, and dense enough to completely obstruct the line of sight between the source and the receiver. This amount of vegetation may provide up to 5 dB of noise reduction. The Federal Highway Administration (FHWA) does not consider planting vegetation to be a noise abatement measure.

Structural Noise Attenuation

Sound levels can also be attenuated by built or natural barriers. Solid walls or slopes associated with elevation differences typically reduce noise levels by 5 to 10 dB (Caltrans 2020). Structures can also provide noise reduction by insulating interior spaces from outdoor noise. The outside-to-inside noise attenuation provided by typical structures in California ranges from 17 to 30 dB with open and closed windows, respectively.

Traffic Noise Prediction

Vehicle noise is a combination of the noise produced by engines, exhaust, and tires on the roadway. Per the Highway Traffic Noise Analysis and Abatement Policy and Guidance (DOT 2011), the level of traffic noise depends on three primary factors: the volume of the traffic, the speed of the traffic, and the vehicle mix within the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and a greater number of trucks. A doubling of the traffic volume, if the speed and vehicle mix do not change, results in a noise level increase of 3 dB. The vehicle mix on a given roadway may also influence community noise levels. As the number of medium and heavy trucks increases and becomes a larger percentage of the vehicle mix, roadway noise levels will increase.

Noise Control

Noise control is the process of obtaining an acceptable noise environment for an observation point or receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver concept. In general, noise control measures can be applied to these three elements.

Noise Barrier Attenuation

Effective noise barriers can reduce noise levels by 10 to 15 dB, cutting the loudness of traffic noise or a stationary noise source in half. A noise barrier is most effective when placed close to the noise source or receiver. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path from the noise source.

Land Use Compatibility with Noise/Noise-Sensitive Land Uses

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial and industrial developments and related activities. Land uses that can be easily affected by increased noise levels are referred to as noise-sensitive land uses. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop, and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. FHWA encourages state and local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. For instance, major new commercial or industrial development with the potential to generate noise must avoid increasing the noise level experienced at noise-sensitive land uses in the Proposed Project's vicinity.

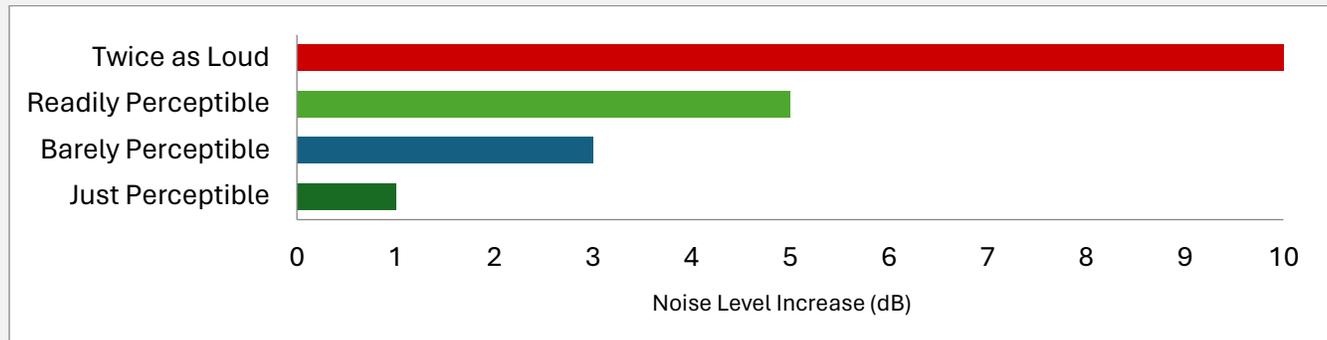
Community Response to Noise

Community responses to noise may range from registering a complaint to initiating court action, depending on susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance:

- Fear associated with noise-producing activities
- Socioeconomic status and educational level
- Perception that those affected are being unfairly treated
- Attitudes regarding the usefulness of the noise-producing activity
- Belief that the noise source can be controlled

Approximately 10% of the population has a very low tolerance for noise and will object to any noise not of their own making. Consequently, even in the quietest environment, some complaints will occur. Another 25% of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. Surveys have shown that about 10% of the people exposed to traffic noise of 60 dBA will report being highly annoyed with the noise, and each increase of 1 dB is associated with approximately 2% more people being highly annoyed. When traffic noise exceeds 60 dBA or aircraft noise exceeds 55 dBA, people may begin to complain.

Despite this variability in behavior on an individual level, the population can be expected to exhibit responses to changes in noise levels, as shown in Exhibit 3.11-1. An increase or decrease of 1 dB cannot be perceived except in carefully controlled laboratory experiments, a change of 3 dB is considered barely perceptible, and changes of 5 dB are considered readily perceptible.

Exhibit 3.11-1. Noise Level Increase Perception

Source: Caltrans 2013.

Vibration

Per the Federal Transit Administration (FTA) Transit Noise Impact and Vibration Assessment Manual (FTA 2018), vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency.

There are several different methods that are used to quantify vibration. The peak particle velocity is defined as the maximum instantaneous peak of the vibration signal. Peak particle velocity is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance), because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square. The root mean square amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to denote vibration pressures in a medium other than air, to differentiate it from sound pressure in air (dB). Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, older adults, and sick people), and vibration-sensitive equipment and/or activities.

The background vibration-velocity level in residential areas is generally 50 VdB. Groundborne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Typical vibration levels for various sources, and their respective impact are provided in Figure 3.11-1, Typical Levels of Groundborne Vibration and Human/Structural Response.

Existing Noise Conditions

To assess the existing noise-level environment, a survey of the ambient noise environment was performed at five locations for a duration of 24 hours in the Proposed Project study area (see Table 3.11-2). The background ambient noise levels in the Proposed Project study area were dominated by noise associated with vehicular traffic nearby on surface streets, with aircraft operations at March ARB/Inland Port Airport contributing to a lesser degree. Existing residential land uses are located approximately 0.5 miles east and 2 miles south of the project site within the City of Moreno Valley, City of Perris, and County of Riverside jurisdictions. Locations L1, L2, and L3 were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the project site. Location L4 was selected to assess noise levels adjacent to the project site. Location L5 was selected to characterize ambient noise levels at the noise-sensitive receptor with the greatest exposure to aircraft noise levels. The general location of the Proposed Project study area and the noise-level measurement locations are presented in Figure 3.11-2, Project Location and Noise Measurement Locations.

Table 3.11-2. Ambient Noise-Level Measurement Results

Location No. ^a	Description of Location	Energy Average Noise Level (dBA L _{eq}) ^b		CNEL
		Daytime	Nighttime	
L1	North of the project site on Iris Avenue near existing single-family residential homes at 24307 Carman Ln.	65.6	62.6	69.7
L2	East of the project site on Indian St. near existing single-family residential home at 16537 Libra Ln.	60.9	58.7	65.9
L3	East of the project site on Indian St. near existing single-family residential home at 16855 Baltic Ct.	58.5	53.9	61.7
L4	East of the project site on Heacock St. near F&D Distribution Center	68.6	67.8	74.4
L5 ^c	At the residence (617 Markham St.) southwest of the Markham Street intersection	67.0	54.3	71.6

Sources: Appendices L-1 and L-2; Dudek 2023.

Notes: dBA = A-weighted decibels; L_{eq} = energy equivalent sound level; CNEL = community noise equivalent level; daytime = 7:00 a.m. to 10:00 p.m.; nighttime = 10:00 p.m. to 7:00 a.m.

^a Refer to Figure 3.11-2 for the noise-level measurement locations.

^b Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix L-1.

^c Noise measurement location L5 is provided to characterize ambient noise levels at the noise-sensitive receptor with the greatest exposure to aircraft noise levels.

Ambient Noise Measurements

Existing noise-level measurements at Locations L1 through L4 were collected by Urban Crossroads on Wednesday, May 20, 2020. The hourly noise levels were measured during typical weekday conditions over a 24-hour period.¹ The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were

¹ The noise measurements were conducted approximately 2 months into the COVID-19 pandemic, in which state and regional public health orders limiting gatherings, school openings, non-essential travel, and other activities intended to control the spread of the virus were in effect. Consequently, ambient noise levels (such as from traffic) may have been lower than they otherwise would be. However, to the extent that such levels are compared to noise from the Proposed Project, lower ambient noise levels would result in a larger projected noise increase from the Proposed Project; thus, the results would be conservative.

programmed in slow mode to record noise levels in A-weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise-level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters (ANSI S1.4-2014/IEC 61672-1:2013).

An unattended 24-hour outdoor ambient sound monitor was subsequently deployed at location L5 to collect data from February 22-23, 2021. An ANSI Type 2 Piccolo II sound level meter was positioned in front of 617 Markham Street. Additional details are provided in Appendix L-3 (Photographs of and Logged Data from Outdoor Ambient Sound Survey Location L5).

Table 3.11-2 provides the average noise levels measured for the daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) ambient conditions at each noise-level measurement location. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. The 24-hour CNEL noise measurement result for each location is also provided in Table 3.11-2.

Existing Aircraft Noise

As a joint use airport, March ARB/Inland Port Airport is owned and operated by the U.S. Department of the Air Force (DAF) and made available for use by civil aviation (March ARB 2018). Civilian and military entities share essential facilities, and the existing aircraft noise levels include both military and civilian flights. The ambient measurements shown in Table 3.11-2 only include whatever aircraft flew over during that time frame. To develop baseline aircraft noise contours, all the flights over the year (including type of aircraft, time of day, direction, landing/takeoff) are modeled. In January 2024, DAF released the Revised Draft KC-46A Main Operating Base 5 (MOB 5) Beddown Environmental Impact Statement (Draft KC-46A EIS),² which evaluates the replacement of the KC-135 aircraft with the KC-46A aircraft at March ARB (DAF 2024). The Draft KC-46A EIS provided information regarding existing military and civilian flight operations, as shown in Table 3.11-3, and noise contours, as shown in Figure 3.11-3, Baseline Aircraft Operational Noise Levels [dB CNEL] at March ARB/Inland Port Airport. As identified in the Draft KC-46A EIS, civilian flights compose approximately 18% of the total flight operations at March ARB.

Table 3.11-3. Annual Airfield Operations at March ARB

Aircraft	Total Flight Operations
Military	
KC-135	5,367
C-17	8,961
F-16C	1,980
MQ-9	2,272
King Air 350	832
AS-350	275
Military transient	2,939
Civilian	
All civilian	4,972
Total Military and Civilian Flight Operations	27,598

² *Beddown* is a military term that references the execution of a base action, such as establishing a unit on Air Force real property for longer than 1 year (U.S. Air Force 2020).

Source: DAF 2024, Table 2-5 (“Data are based on information provided by operational subject matter experts at March ARB”).

Note: March ARB = March Air Reserve Base.

Figure 3.11-3 provides a representative picture of the existing aircraft noise levels experienced by sensitive receptors. The noise contours in Figure 3.11-3 are based on those appearing in the Draft KC-46A EIS and were used to estimate baseline aviation noise levels at the receiver locations, as listed in Table 3.11-4. Further explanation is provided in Section 3.11.3, Methodology, below. This is consistent with the ambient noise measurements at measurement location L5, shown in Table 3.11-2.

Table 3.11-4. Estimated Baseline Outdoor Ambient Aviation Noise Levels

Receiver Location ^a	Description of Location	Modeled Baseline Noise Levels (dBA CNEL)
R5	Residence at 617 W. Markham St.	65.5
R6	Residence at 637 W. Markham St.	64.7
R7	Residence at 4342 Brennan Ave.	65.2
R8	Residence at 4322 Brennan Ave.	64.6
R9	Residence at 657 W. Markham St.	64.2
R10	Residence at 4302 Brennan Ave.	64.2
R11	Residence at 4262 Brennan Ave.	63.5
R12	Residence at 4232 Brennan Ave.	63.5
R13	Residence at 677 W. Markham St.	63.6
R14	Residence at 616 Perry St.	63.1
R15	Residence at 1341 W. Oleander Ave.	57.0
R16	Residence at 7271 Old 215 Frontage Rd.	52.2
R17	Residence at 7241 Old 215 Frontage Rd.	51.0
R18	Residence at 7235 Old 215 Frontage Rd.	49.9
R19	Residence at 21701 Bay Ave.	50.5
R20	Residence at 13760 Hwy 215	48.6

Source: DAF 2024 and calculations performed by Dudek 2024.

Notes: dBA = A-weighted decibel; CNEL = community noise equivalent level; dB = decibel.

^a Receiver locations R5 through R20 for aircraft operational noise are shown in Figure 3.11-3.

3.11.2 Relevant Plans, Policies, and Ordinances

Federal

Title 40 of the Code of Federal Regulations, Part 205, Subpart B

Federal regulations establish noise limits for medium and heavy trucks (more than 4.5 tons, gross vehicle weight rating) under Title 40 of the Code of Federal Regulations (CFR), Part 205, Subpart B. The federal truck pass-by noise standard is 80 dBA at 50 feet from the vehicle pathway centerline, under specific test procedures. These controls are implemented through regulatory controls on truck manufacturers. There are no comparable standards for vibration, which tend to be specific to the roadway surface, the vehicle load, and other factors.

In 1972, the Noise Control Act (42 USC Section 4901 et seq.) was passed by Congress to promote noise environments in support of public health and welfare. It also established the U.S. Environmental Protection Agency (EPA) Office of Noise Abatement and Control to coordinate federal noise control activities. EPA established

guidelines for noise levels that would be considered safe for community exposure without the risk of adverse health or welfare effects. EPA found that to prevent hearing loss over the lifetime of a receiver, the yearly average L_{eq} should not exceed 70 dBA, and the L_{dn} should not exceed 55 dBA in outdoor activity areas or 45 dBA indoors to prevent interference and annoyance. However, in 1982, EPA phased out the office's funding as part of a shift in federal noise control policy to transfer the primary responsibility of regulating noise to state and local governments. A bill is pending before Congress that would reestablish the Office of Noise Abatement and Control. EPA retains authority to investigate and study noise and its effects, disseminate information to the public regarding noise pollution and its adverse health effects, respond to inquiries on matters relating to noise, and evaluate the effectiveness of regulations for protecting the public health and welfare.

Department of Defense

Air Installations Compatibility Use Zones

The Department of Defense has developed the Air Installations Compatibility Use Zones (AICUZ) program to ensure that development is compatible with aviation operations in areas on and adjacent to military airfields (Air Force Civil Engineer Center 2023). The AICUZ land use recommendations are based on safety considerations and on land use compatibility with exposure to aircraft noise. Recommended compatible land uses are derived from data on noise contours (noise zones) and safety zones (clear zones and accident potential zones).

The 2018 March ARB AICUZ Study is an update of the AICUZ study dated 2005. The update is a reevaluation of aircraft noise and accident potential related to reasonable projections of future DAF flying operations and is designed to aid in the development of local planning mechanisms to protect public safety and health and preserve the planned operational capabilities of March ARB. The update also provides noise contours based on the CNEL metric and uses a planning noise contour. Based on its position relative to Heacock Street, as shown on Figure 3.11-2, the project site is located within the 60 A-weighted decibel (dBA) and 70 dBA Noise Contour Level (Figure 3.11-4, March ARB 2018 AICUZ Noise Contours). Industrial and commercial land uses are considered compatible for noise contours less than 80 dBA CNEL (March ARB 2018). Some commercial land uses come with limitations, which generally include a required noise level reduction, as defined in Appendix A, Table A-2, of the AICUZ Study (March ARB 2018).

State

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element that is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels.

Hearing Conservation and Personal Protective Equipment

Title 8 of the California Code of Regulations (CCR), Section 5095 et seq., establishes requirements for controlling occupational exposures to noise. When employees are subjected to sound levels exceeding those set forth in the regulations, feasible administrative or engineering controls must be utilized or personal protective equipment must be provided (8 CCR, Section 5096). A hearing conservation program is required to be administered by employers for employees who are exposed to noise above an 8-hour time-weighted average of 85 dBA (8 CCR, Section 5097).

Additionally, employers must make hearing protectors available to all employees exposed to the 8-hour time-weighted average of 85 dBA or greater at no cost to the employee (8 CCR, Section 5098).

State of California Building Code

The 2022 State of California's Green Building Standards Code (CALGreen) contains mandatory acoustical control measures for non-residential building construction in Section 5.507 on Environmental Comfort. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources, but do not apply where occupants are not likely to be affected by exterior noise, such as factories, stadiums, storage facilities, enclosed parking buildings, and utility buildings. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, or other area where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class rating of the wall and roof/ceiling assemblies must be at least 50 or a composite outdoor/indoor transmission class rating of no less than 40 (CALGreen Section 5.507.4.1).

Government Code Section 65302(f)

California Government Code Section 65302(f) requires the preparation of a Noise Element in a General Plan that identifies and appraises the noise problems in the community. The Noise Element must recognize the guidelines adopted by the Office of Noise Control in the State Department of Health Services, and must quantify, to the extent practicable, current and projected noise levels for the following sources:

- Highways and freeways
- Primary arterials and major local streets
- Passenger and freight on-line railroad operations and ground rapid transit systems
- Aviation and airport-related operations
- Local industrial plants
- Other ground stationary noise sources contributing to the community noise environment

California General Plan Guidelines

The California General Plan Guidelines, published by the Governor's Office of Planning and Research, provides guidance for the acceptability of specific land use types within areas of specific noise exposure. Table 3.11-5 presents California's guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community. The Governor's Office of Planning and Research guidelines are advisory in nature.

Table 3.11-5. Land Use Compatibility for Community Noise Environments

Land Use	Community Noise Exposure (dBA CNEL)			
	Normally Acceptable ^a	Conditionally Acceptable ^b	Normally Unacceptable ^c	Clearly Unacceptable ^d
Residential-low density, single-family, duplex, mobile homes	50-60	55-70	70-75	75-85
Residential - multiple-family	50-65	60-70	70-75	70-85
Transit lodging - motel, hotels	50-65	60-70	70-80	80-85
Schools, libraries, churches, hospitals, nursing homes	50-70	60-70	70-80	80-85
Auditoriums, concert halls, amphitheatres	N/A	50-70	N/A	65-85
Sports arenas, outdoor spectator sports	N/A	50-75	N/A	70-85
Playgrounds, neighborhood parks	50-70	NA	67.5-77.5	72.5-85
Golf courses, riding stables, water recreation, cemeteries	50-70	NA	70-80	80-85
Office buildings, business commercial and professional	50-70	67.5-77.5	75-85	N/A
Industrial, manufacturing, utilities, agriculture	50-75	70-80	75-85	N/A

Notes: dBA = A-weighted decibels; CNEL = community noise equivalent level; N/A = not applicable.

- ^a Normally acceptable = specified land use is satisfactory based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
- ^b Conditionally acceptable = new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.
- ^c Normally unacceptable = new construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.
- ^d Clearly unacceptable = new construction or development should generally not be undertaken.

Local

The Riverside County Airport Land Use Compatibility Plan (ALUCP) Policy Document, which includes County-wide policies, provides criteria for determining the land use compatibility of a project that is located within 2 miles of an airport runway. Policy 4.1.5, Noise Exposure for Other Land Uses, of the Riverside County ALUCP identifies the compatibility of different land uses with different noise levels at CNEL 50 dBA and higher (County of Riverside 2004). The March ARB/Inland Port Airport ALUCP provides March ARB/Inland Port-specific policies. As set forth in Policy MA.2.3(a), the CNEL considered normally acceptable for new residential land uses in the vicinity of March ARB/Inland Port Airport is 65 dBA (County of Riverside 2014). Table 3.11-6 provides the noise compatibility criteria for March ARB/Inland Port Airport.

Table 3.11-6. Riverside County Airport Land Use Compatibility Criteria: Noise

Land Use Category	Noise Level (dBA CNEL)				
	50-55	55-60	60-65	65-70	70-75
Residential					
Single-family, nursing homes, mobile homes	++	+	+	--	--
Multi-family, apartment, condominiums	++	+	+	--	--
Public					
Schools, libraries, hospitals	+	o	-	--	--
Churches, auditoriums, concert halls	+	o	o	-	--
Transportation, parking, cemeteries	++	++	++	+	o
Commercial and Industrial					
Offices, retail trade	++	+	o	o	-
Service commercial, wholesale trade, warehousing, light industrial	++	++	+	o	o
General manufacturing, utilities, extractive industry	++	++	++	+	+
Agricultural and Recreational					
Cropland	++	++	++	++	+
Livestock breeding	++	+	o	o	-
Parks, playgrounds, zoos	++	+	+	o	-
Golf courses, riding stables, water recreation	++	++	+	o	o
Outdoor spectator sports	++	+	+	o	-
Amphitheaters	+	o	-	--	--

Source: Adapted from County of Riverside 2004, Table 2B, County of Riverside 2014 MA.2.3(a).

Notes: dBA = A-weighted decibels; CNEL = community noise equivalent level.

**Land Use Acceptability
(Compatibility)**

Interpretation/Comments

++	Clearly acceptable	The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.
+	Normally acceptable	Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.
o	Marginally acceptable	The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. The land use is acceptable on the conditions that outdoor activities are minimal and construction features which provide sufficient noise attenuation are used (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged.
-	Normally unacceptable	Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses which have conventionally constructed structures and/or involve outdoor activities which would be disrupted by noise should generally be avoided.
--	Clearly unacceptable	Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided unless strong overriding factors prevail and it should be prohibited if outdoor activities are involved.

March Joint Powers Authority General Plan

March JPA's adopted General Plan policies are described in this section in relation to the Proposed Project. The Noise/Air Quality Element of the General Plan identifies several goals and policies to protect and enhance the quality of life for those who live and work in the March JPA jurisdiction. The Noise/Air Quality Element provides policy guidance that addresses the generation, mitigation, avoidance, and control of excessive noise. The adopted March JPA General Plan includes the following goals and policies in the Noise/Air Quality Element that would apply to the Proposed Project (March JPA 1999):

Goal 1: Ensure that land uses are protected from excessive and unwanted noise.

Policy 1.1: Establish acceptable limits of noise for various land uses throughout the March JPA Planning Area. Future development that could increase ambient noise levels shall be required to mitigate the anticipated noise increase, to the extent possible.

Policy 1.2: Noise sensitive uses (such as schools, libraries, hospitals, medical facilities, residential uses, etc.) shall be discouraged in areas where noise levels exceed acceptable limits.

Policy 1.3: Encourage good acoustical design in new construction.

Policy 1.4: Provide buffer areas between noise sources and other developments, where practical.

Goal 2: Minimize incompatible noise level exposures throughout the Planning Area, and where possible, mitigate the effect of noise incompatibilities to provide a safe and healthy environment.

Policy 2.2: Noise generating facilities shall be located in areas with compatible noise generating land uses (i.e., airport noise contour areas) to minimize land use incompatibilities, noise abatement and mitigation measures needed.

Policy 2.4: March JPA shall evaluate noise sensitivity and noise generation when considering land use Projects and transportation improvement Projects, and where appropriate mitigation measures shall be employed.

Policy 2.5: March JPA shall utilize and comply with Caltrans standards for noise compatibility for aviation generated noise to proposed land use development.

Goal 3: Work toward the reduction of noise impacts from vehicular traffic, and aviation and rail operations.

Policy 3.1: Include mitigating measures such as landscaping, berming and site orientation, in the design of Projects located near noise generating sources such as arterial roadways.

Policy 3.3: Adhere to the adopted AICUZ and Comprehensive Land Use Plan standards and promote the use of newer and quieter aircraft and support equipment.

Policy 3.4: Where appropriate, noise mitigation measures shall be incorporated in the design and approval of development on property located adjacent to aviation and rail facilities.

Policy 3.5: Where appropriate, development in areas adjacent to freeways, arterial streets, and other noise source shall be designed to reduce the potential for noise impacts.

Policy 3.6: Regulate the use of local streets by trucks, trailers, and construction vehicles, to the extent possible.

Policy 3.7: Limit trucking operations to appropriate routes, times and speeds.

Policy 3.8: Appropriate muffling systems for construction equipment and operations shall be required, as necessary.

Policy 3.9: March JPA shall encourage and facilitate the use of mass transit services and alternative transportation systems to minimize dependence of the automobile within the Planning Area, thereby minimizing the level of noise generated by surface transportation.

March Joint Powers Commission of the March Joint Powers Utilities Authority

March JPA adopted resolution MJPUA 18-03 on October 24, 2018, for inclusion of the threshold of significance in March JPA's Local Guidelines for Implementing the California Environmental Quality Act (CEQA) (March JPA 2022):

Noise. Would the proposed project result in aircraft operations (i.e., aircraft landings and/or takeoffs) at the March Inland Port Airport between 10:00 p.m. and 6:59 a.m.³ that could expose people within the March Inland Port Airport's vicinity to a significant risk of sleep disturbance due to noise?

March JPA Development Code

The March JPA Development Code, Section 9.10.140, Noise and Sound, identifies the exterior stationary-source noise level standards for commercial and industrial land uses. Based on Section 9.10.140 of the Development Code, the exterior noise level must not exceed 55 dBA L_{eq} at any time beyond the boundaries of the property. If the sound from noise attention or attracting devices (e.g., loudspeakers, bells, gongs, buzzers) creates a noise disturbance across the property line of a residential use, that sound must cease between 10:00 p.m. and 7:00 a.m.

The Development Code, Section 9.10.140, specifies that outdoor construction and grading activities, including the operation of any tools or equipment associated with construction, drilling, repair, alteration, grading/grubbing, or demolition work within 500 feet of the property line of a residential use is prohibited between 7:00 p.m. and 7:00 a.m. Monday through Friday, and between 5:00 p.m. and 8:00 a.m. on Saturdays or at any time on Sunday or a federal holiday. Construction activities are considered exempt from the noise performance standards if they occur within the above-described permitted hours; consequently, the Development Code does not identify a specific noise-level standard for construction activity.

City of Moreno Valley General Plan

The City of Moreno Valley noise standards for land use compatibility and long-term planning are contained within the City of Moreno Valley General Plan Safety Element, which was adopted July 2006. General discussion of noise within the City of Moreno Valley, along with planning and design considerations, are provided in Section 6.4 of the Safety Element.

³ Daytime/evening/nighttime hours have been rounded to whole hours for analysis in this EIR; e.g., this threshold is discussed in terms of aircraft operations between 10:00 p.m. and 7:00 a.m.

Although the noise section of the Safety Element provides background and noise fundamentals, it does not identify criteria to assess the impacts of noise within the City of Moreno Valley (City of Moreno Valley 2006).

Chapter 9 of the General Plan outlines the goals and objectives of the City of Moreno Valley that serve to provide noise-compatible land use standards, minimize impacts for existing and future land uses, and promote development of land use patterns that aid in the reduction of transportation and non-transportation noise. The policies that are relevant to this Proposed Project provide subjective guidance to address noise and are presented below (City of Moreno Valley 2006):

Policy 6.5.1: New commercial and industrial activities (including the placement of mechanical equipment) shall be evaluated and designed to mitigate noise impacts on adjacent uses.

Policy 6.5.2: Construction activities shall be operated in a manner that limits noise impacts on surrounding uses.

City of Moreno Valley Code

The City of Moreno Valley Municipal Code, Chapter 11.80 Noise Regulation, provides performance standards and noise control guidelines for determining and mitigating non-transportation or stationary-source noise impacts from operations at private properties. The City of Moreno Valley Municipal Code defines Maximum Sound Levels (in dBA) for Source Land Uses in Table 11.80.030-2 for Residential and Commercial land uses. As defined by the Municipal Code, Section 11.80.020, Definitions, Commercial land use means all uses of land not otherwise classified as residential, and Residential land use means all uses of land primarily for dwelling units, as well as hospitals, schools, colleges and universities, and places of religious assembly. For the purpose of this analysis, the Proposed Project is considered a Commercial land use since it is not classified as Residential. Based on this standard, the operational noise level limits for commercial land use, from Table 11.80.030-2, of 65 dBA L_{eq} during daytime hours (8:00 a.m. to 10:00 p.m.) and 60 dBA L_{eq} during nighttime hours (10:00 p.m. to 8:00 a.m.) apply to the operational noise-source activities from the Proposed Project. Further, Section 11.80.030(C) Prohibited Acts, Nonimpulsive Sound Decibel Limits, of the Municipal Code states the following:

No person shall maintain, create, operate or cause to be operated on private property any source of sound in such a manner as to create any nonimpulsive sound which exceeds the limits set forth for the source land use category (as defined in Section 11.80.020) in Table 11.80.030-2 when measured at a distance of two hundred (200) feet or more from the real property line of the source of the sound, if the sound occurs on a privately owned property.

Therefore, at a distance of 200 feet from the property line, the Proposed Project’s operational noise levels must not exceed the 65 dBA L_{eq} daytime and 60 dBA L_{eq} nighttime noise-level standards for commercial land uses, as shown in Table 3.11-7.

Table 3.11-7. Operational Noise Standards

Jurisdiction	Land Use	Noise Level Standards (dBA L_{eq})	
		Daytime	Nighttime
March JPA ^a	Commercial and Industrial	55	
Moreno Valley ^b	Commercial	65	60

Notes: dBA = A-weighted decibels; L_{eq} = noise equivalent level; daytime = 8:00 a.m. to 10:00 p.m.; nighttime = 10:00 p.m. to 8:00 a.m.

^a March Joint Powers Authority, Development Code, Chapter 9.10 Performance Standards, Section 9.10.140.

- b City of Moreno Valley Municipal Code, Chapter 11.80, Noise Regulation, Table 11.80.030-2, Maximum Sound Levels (in dBA) for Source Land Uses, when measured at 200 feet from the property line of the source land use.

As a subset of its stationary-source noise regulations, the City of Moreno Valley Municipal Code establishes permitted hours of construction activity. More specifically, Municipal Code Section 11.80.030(D)(7), Construction and Demolition, provides the following:

No person shall operate, or cause operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between the hours of eight p.m. and seven a.m. the following day such that the sound there from creates a noise disturbance, except for emergency work by public service utilities or for other work approved by the city manager or designee.

City of Perris General Plan

The following City of Perris General Plan Noise Element policies are applicable to the Proposed Project (City of Perris 2016):

Policy 1.A: The State of California Noise/Land Use Compatibility Criteria shall be used in determining land use compatibility for new development.

City of Perris Municipal Code

Section 7.34.060 - Construction Noise. It is unlawful for any person between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington's birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. Construction activity shall not exceed 80 dBA in residential zones in the city.

Vibration Standards

Construction activity can result in varying degrees of groundborne vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment, such as air compressors, light trucks, and hydraulic loaders, generates little or no ground vibration (FTA 2018). To analyze vibration impacts originating from operation and construction of a project, vibration-generating activities are evaluated against standards established under a jurisdiction's Municipal Code, if such standards exist. However, the March JPA does not identify specific vibration level limits, and instead rely on the FTA methodology. The FTA Transit Noise and Vibration Impact Assessment methodology provides guidelines for the maximum acceptable vibration criteria for different types of land uses. These guidelines allow 90 VdB for industrial (workshop) use, 84 VdB for office use, 78 VdB for daytime residential uses, and 72 VdB for nighttime uses in buildings where people normally sleep (FTA 2018).

3.11.3 Methodology

This section outlines the methods and procedures used to model and analyze the potential for the Proposed Project to impact the future noise environment. CEQA requires that the noise impacts caused by the Proposed Project be considered; for the proposed commercial development, the principal source of Project-generated noise would be the addition of transportation noise in the form of vehicle trips on area roadways and increased commercial cargo aircraft operations at March ARB/Inland Port Airport. Additional activities associated with the Proposed Project that

are included in the impact analysis are short-term/temporary noise and vibration generated during construction activities and long-term non-transportation (a.k.a. stationary-source) operational-source noise generated during on-site operations of the Proposed Project.

Federal Highway Administration Traffic Noise Prediction Model

The expected roadway noise-level increases from vehicular traffic were calculated by Urban Crossroads using a computer program that replicates FHWA's Traffic Noise Prediction Model – FHWA-RD-77-108 (DOT 1978). The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level. In California, the national Reference Energy Mean Emission Levels are substituted with the California Vehicle Noise Emission Levels (Caltrans 1995b). Adjustments are then made to the Reference Energy Mean Emission Level to account for the roadway classification (e.g., collector, secondary, major, or arterial); the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway); the total average daily traffic; travel speed; the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume; the roadway grade; the angle of view (e.g., whether the roadway view is blocked); the site conditions (“hard” or “soft” relates to the absorption of the ground, pavement, or landscaping); and the percentage of total average daily traffic that flows each hour throughout a 24-hour period. Research conducted by the California Department of Transportation (Caltrans) has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis (Caltrans 1995a).

Off-Site Traffic Noise Prediction Model Inputs

Table 3.11-8 presents the roadway parameters used to assess the Proposed Project's off-site transportation noise impacts. Table 3.11-8 identifies the nine study area roadway segments, the distance from the centerline to adjacent receiving land use based on the functional roadway classifications per the City of Moreno Valley and City of Perris General Plan Circulation Elements, and the posted vehicle speeds. The average daily traffic volumes used in this analysis are presented in Table 3.11-9 and were obtained from the Traffic Analysis prepared for the Proposed Project (Appendix M-1) for the following traffic scenarios:

- Existing (2020)
- Existing Plus Project (Non-Peak) Conditions
- Existing Plus Project (Peak) Conditions
- Opening Year Cumulative (2026) without Project Conditions
- Opening Year Cumulative (2026) with Project (Non-Peak) Conditions
- Opening Year Cumulative (2026) with Project (Peak) Conditions
- Horizon Year (2045) without Project, without Heacock Street Extension⁴ Conditions
- Horizon Year (2045) with Project (Non-Peak), without Heacock Street Extension Conditions
- Horizon Year (2045) with Project (Peak), without Heacock Street Extension Conditions
- Horizon Year (2045) without Project, with Heacock Street Extension Conditions
- Horizon Year (2045) with Project (Non-Peak), with Heacock Street Extension Conditions
- Horizon Year (2045) with Project (Peak), with Heacock Street Extension Conditions

⁴ The future extension of Heacock Street from its existing terminus to Harley Knox Boulevard is a long-range planned connection (where it would connect with the existing roundabout at N. Webster Avenue and Harley Knox Boulevard). However, Horizon Year (2045) traffic conditions were evaluated both without and with the extension in the event that the connection is not in place by Year 2045. As such, the Heacock Street Extension, from Nandina Avenue to Harley Knox Boulevard, is assumed to be in place for Horizon Year (2045) with Heacock Street Extension conditions only.

Table 3.11-8. Off-Site Roadway Parameters

ID	Roadway	Segment	Receiving Land Use ^a	Distance from Centerline to Receiving Land Use (Feet) ^b	Posted Vehicle Speed (mph)
1	Heacock St.	North of Gentian Ave.	Sensitive	50	50
2	Heacock St.	South of Iris Ave.	Non-Sensitive	50	50
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	50	50
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	50	50
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	44	45
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	55	50
7	Cactus Ave.	East of Heacock St.	Sensitive	44	40
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	64	45
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	64	45

Source: Appendix L-1.

Notes: mph = miles per hour.

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b Distance to adjacent land use is based on the right-of-way distances for each functional roadway classification provided in the General Plan Circulation Elements.

Table 3.11-9. Average Daily Traffic Volumes

ID	Roadway	Segment	Average Daily Traffic Volumes											
			Existing 2020			Opening Year Cumulative 2026			Horizon Year 2045 without Heacock Street Extension			Horizon Year 2045 with Heacock Street Extension		
			Without Project	With Project (Non-Peak)	With Project (Peak)	Without Project	With Project (Non-Peak)	With Project (Peak)	Without Project	With Project (Non-Peak)	With Project (Peak)	Without Project	With Project (Non-Peak)	With Project (Peak)
1	Heacock St.	North of Gentian Ave.	23,451	23,851	24,040	30,518	30,918	31,106	33,022	33,422	33,611	33,022	33,422	33,611
2	Heacock St.	South of Iris Ave.	14,212	14,712	14,948	28,359	28,859	29,095	28,473	28,973	29,209	28,473	28,973	29,209
3	Heacock St.	South of Cardinal Ave.	15,260	15,986	16,330	29,218	29,944	30,288	31,784	32,510	32,854	31,784	32,510	32,854
4	Heacock St.	South of Nandina Ave.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14,626	14,626	14,626
5	Indian Ave.	South of Nandina Ave.	10,148	10,774	11,071	30,195	30,821	31,119	32,978	33,604	33,901	27,978	28,604	28,901
6	Cactus Ave.	West of Heacock St.	38,888	39,088	39,182	54,347	54,547	54,641	58,874	59,074	59,168	58,874	59,074	59,168
7	Cactus Ave.	East of Heacock St.	23,388	23,518	23,580	36,831	36,961	37,022	39,968	40,098	40,159	39,968	40,098	40,159
8	Harley Knox Blvd.	East of Patterson Ave.	17,290	17,866	18,140	31,409	31,985	32,258	34,146	34,722	34,995	34,146	34,722	34,995
9	Harley Knox Blvd.	East of Indian Ave.	8,896	8,896	8,896	15,031	15,031	15,031	16,326	16,326	16,326	16,647	16,647	16,647

Source: Appendix L-1.

Note: N/A = not applicable.

To quantify off-site noise levels, Proposed Project-related truck trips were added to the heavy truck category in the FHWA noise prediction model. The addition of the Proposed Project-related truck trips increased the percentage of heavy trucks in the vehicle mix. This approach recognizes that the FHWA noise prediction model is significantly influenced by the number of heavy trucks in the vehicle mix. Due to the added Proposed Project truck trips, the change in Proposed Project traffic volumes, and the distributions of trucks on the study area road segments, the percentage of autos, medium trucks, and heavy trucks varies for each of the traffic scenarios. This explains why the existing and future traffic volumes and vehicle mixes vary between seemingly identical study area roadway segments.

Table 3.11-10 provides the time of day (daytime, evening, and nighttime) vehicle splits. The daily Proposed Project truck trip ends were assigned to the individual off-site study area roadway segments based on the Proposed Project truck trip distribution percentages documented in the Traffic Analysis (Appendix M-1). Using the Proposed Project truck trips in combination with the Proposed Project trip distribution, the number of additional Proposed Project truck trips and vehicle mix percentages were calculated for each of the study area roadway segments. Table 3.11-11 shows the traffic flow by vehicle type (vehicle mix) used for all “without Project” traffic scenarios, and Tables 3.11-12 to 3.11-19 show the vehicle mixes used for the “with Project” traffic scenarios.

Table 3.11-10. Time of Day Vehicle Splits

Vehicle Type	Time of Day Splits			Total of Time of Day Splits
	Daytime	Evening	Nighttime	
Autos	77.50%	12.90%	9.60%	100.00%
Medium trucks	84.80%	4.90%	10.30%	100.00%
Heavy trucks	86.50%	2.70%	10.80%	100.00%

Source: Appendix L-1.

Notes: Daytime = 7:00 a.m. to 7:00 p.m.; evening = 7:00 p.m. to 10:00 p.m.; nighttime = 10:00 p.m. to 7:00 a.m.

Table 3.11-11. Existing without Project Vehicle Mix

Classification	Total Percent Traffic Flow			Total
	Autos	Medium Trucks	Heavy Trucks	
All Segments	86.23%	2.67%	11.10%	100.00%

Source: Appendix L-1.

Notes: Based on an existing vehicle count taken at Patterson Avenue and Harley Knox Boulevard. Vehicle mix percentage values rounded to the nearest one-hundredth.

Table 3.11-12. Existing with (Non-Peak) Project Vehicle Mix

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
1	Heacock St.	North of Gentian Ave.	87.07%	1.90%	11.02%	100.00%
2	Heacock St.	South of Iris Ave.	87.30%	1.87%	10.83%	100.00%
3	Heacock St.	South of Cardinal Ave.	85.72%	2.02%	12.25%	100.00%
4	Heacock St.	South of Nandina Ave.	86.85%	1.94%	11.21%	100.00%
5	Indian Ave.	South of Nandina Ave.	85.06%	2.08%	12.86%	100.00%
6	Cactus Ave.	West of Heacock St.	86.92%	1.93%	11.15%	100.00%

Table 3.11-12. Existing with (Non-Peak) Project Vehicle Mix

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
7	Cactus Ave.	East of Heacock St.	86.93%	1.93%	11.15%	100.00%
8	Harley Knox Blvd.	East of Patterson Ave.	85.73%	2.03%	12.24%	100.00%
9	Harley Knox Blvd.	East of Indian Ave.	86.85%	1.94%	11.21%	100.00%

Source: Appendix L-1

Note:^a Total of vehicle mix percentage values rounded to the nearest one-hundredth.**Table 3.11-13. Existing with (Peak) Project Vehicle Mix**

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
1	Heacock St.	North of Gentian Ave.	87.18%	1.89%	10.94%	100.00%
2	Heacock St.	South of Iris Ave.	87.50%	1.84%	10.66%	100.00%
3	Heacock St.	South of Cardinal Ave.	85.22%	2.06%	12.72%	100.00%
4	Heacock St.	South of Nandina Ave.	86.85%	1.94%	11.21%	100.00%
5	Indian Ave.	South of Nandina Ave.	84.26%	2.14%	13.59%	100.00%
6	Cactus Ave.	West of Heacock St.	86.95%	1.92%	11.13%	100.00%
7	Cactus Ave.	East of Heacock St.	86.96%	1.92%	11.12%	100.00%
8	Harley Knox Blvd.	East of Patterson Ave.	85.22%	2.07%	12.71%	100.00%
9	Harley Knox Blvd.	East of Indian Ave.	86.85%	1.94%	11.21%	100.00%

Source: Appendix L-1.

Note:^a Total of vehicle mix percentage values rounded to the nearest one-hundredth.**Table 3.11-14. Opening Year Cumulative with (Non-Peak) Project Vehicle Mix**

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
1	Heacock St.	North of Gentian Ave.	87.02%	1.91%	11.06%	100.00%
2	Heacock St.	South of Iris Ave.	87.08%	1.90%	11.02%	100.00%
3	Heacock St.	South of Cardinal Ave.	86.25%	1.98%	11.77%	100.00%
4	Heacock St.	South of Nandina Ave.	86.85%	1.94%	11.21%	100.00%
5	Indian Ave.	South of Nandina Ave.	86.23%	1.99%	11.79%	100.00%
6	Cactus Ave.	West of Heacock St.	86.90%	1.93%	11.17%	100.00%
7	Cactus Ave.	East of Heacock St.	86.90%	1.93%	11.17%	100.00%
8	Harley Knox Blvd.	East of Patterson Ave.	86.23%	1.99%	11.78%	100.00%
9	Harley Knox Blvd.	East of Indian Ave.	86.85%	1.94%	11.21%	100.00%

Source: Appendix L-1.

Note:^a Total of vehicle mix percentage values rounded to the nearest one-hundredth.

Table 3.11-15. Opening Year Cumulative with (Peak) Project Vehicle Mix

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
1	Heacock St.	North of Gentian Ave.	87.10%	1.90%	11.00%	100.00%
2	Heacock St.	South of Iris Ave.	87.19%	1.89%	10.93%	100.00%
3	Heacock St.	South of Cardinal Ave.	85.97%	2.00%	12.03%	100.00%
4	Heacock St.	South of Nandina Ave.	86.85%	1.94%	11.21%	100.00%
5	Indian Ave.	South of Nandina Ave.	85.93%	2.01%	12.06%	100.00%
6	Cactus Ave.	West of Heacock St.	86.92%	1.93%	11.15%	100.00%
7	Cactus Ave.	East of Heacock St.	86.92%	1.93%	11.15%	100.00%
8	Harley Knox Blvd.	East of Patterson Ave.	85.94%	2.01%	12.05%	100.00%
9	Harley Knox Blvd.	East of Indian Ave.	86.85%	1.94%	11.21%	100.00%

Source: Appendix L-1.

Note:^a Total of vehicle mix percentage values rounded to the nearest one-hundredth.**Table 3.11-16. Horizon Year with (Non-Peak) Project Vehicle Mix without Heacock Street Extension**

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
1	Heacock St.	North of Gentian Ave.	87.01%	1.91%	11.08%	100.00%
2	Heacock St.	South of Iris Ave.	87.08%	1.90%	11.02%	100.00%
3	Heacock St.	South of Cardinal Ave.	86.30%	1.98%	11.72%	100.00%
4	Heacock St.	South of Nandina Ave.	86.85%	1.94%	11.21%	100.00%
5	Indian Ave.	South of Nandina Ave.	86.28%	1.98%	11.74%	100.00%
6	Cactus Ave.	West of Heacock St.	86.90%	1.93%	11.17%	100.00%
7	Cactus Ave.	East of Heacock St.	86.90%	1.93%	11.17%	100.00%
8	Harley Knox Blvd.	East of Patterson Ave.	86.28%	1.98%	11.74%	100.00%
9	Harley Knox Blvd.	East of Indian Ave.	86.85%	1.94%	11.21%	100.00%

Source: Appendix L-1.

Note:^a Total of vehicle mix percentage values rounded to the nearest one-hundredth.**Table 3.11-17. Horizon Year with (Peak) Project Vehicle Mix without Heacock Street Extension**

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
1	Heacock St.	North of Gentian Ave.	87.08%	1.90%	11.01%	100.00%
2	Heacock St.	South of Iris Ave.	87.19%	1.89%	10.93%	100.00%
3	Heacock St.	South of Cardinal Ave.	86.04%	2.00%	11.96%	100.00%
4	Heacock St.	South of Nandina Ave.	86.85%	1.94%	11.21%	100.00%

Table 3.11-17. Horizon Year with (Peak) Project Vehicle Mix without Heacock Street Extension

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
5	Indian Ave.	South of Nandina Ave.	86.01%	2.00%	11.99%	100.00%
6	Cactus Ave.	West of Heacock St.	86.92%	1.93%	11.15%	100.00%
7	Cactus Ave.	East of Heacock St.	86.92%	1.93%	11.16%	100.00%
8	Harley Knox Blvd.	East of Patterson Ave.	86.01%	2.01%	11.99%	100.00%
9	Harley Knox Blvd.	East of Indian Ave.	86.85%	1.94%	11.21%	100.00%

Source: Appendix L-1.

Note:

^a Total of vehicle mix percentage values rounded to the nearest one-hundredth.

Table 3.11-18. Horizon Year with (Non-Peak) Project Vehicle Mix with Heacock Street Extension

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
1	Heacock St.	North of Gentian Ave.	87.01%	1.91%	11.08%	100.00%
2	Heacock St.	South of Iris Ave.	87.08%	1.90%	11.02%	100.00%
3	Heacock St.	South of Cardinal Ave.	86.30%	1.98%	11.72%	100.00%
4	Heacock St.	South of Nandina Ave.	86.85%	1.94%	11.21%	100.00%
5	Indian Ave.	South of Nandina Ave.	86.18%	1.99%	11.83%	100.00%
6	Cactus Ave.	West of Heacock St.	86.90%	1.93%	11.17%	100.00%
7	Cactus Ave.	East of Heacock St.	86.90%	1.93%	11.17%	100.00%
8	Harley Knox Blvd.	East of Patterson Ave.	86.28%	1.98%	11.74%	100.00%
9	Harley Knox Blvd.	East of Indian Ave.	86.85%	1.94%	11.21%	100.00%

Source: Appendix L-1.

Note:

^a Total of vehicle mix percentage values rounded to the nearest one-hundredth.

Table 3.11-19. Horizon Year with (Peak) Project Vehicle Mix with Heacock Street Extension

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
1	Heacock St.	North of Gentian Ave.	87.08%	1.90%	11.01%	100.00%
2	Heacock St.	South of Iris Ave.	87.19%	1.89%	10.93%	100.00%
3	Heacock St.	South of Cardinal Ave.	86.04%	2.00%	11.96%	100.00%
4	Heacock St.	South of Nandina Ave.	86.85%	1.94%	11.21%	100.00%
5	Indian Ave.	South of Nandina Ave.	85.86%	2.02%	12.12%	100.00%
6	Cactus Ave.	West of Heacock St.	86.92%	1.93%	11.15%	100.00%
7	Cactus Ave.	East of Heacock St.	86.92%	1.93%	11.16%	100.00%

Table 3.11-19. Horizon Year with (Peak) Project Vehicle Mix with Heacock Street Extension

ID	Roadway	Segment	With Project			
			Autos	Medium Trucks	Heavy Trucks	Total ^a
8	Harley Knox Blvd.	East of Patterson Ave.	86.01%	2.01%	11.99%	100.00%
9	Harley Knox Blvd.	East of Indian Ave.	86.85%	1.94%	11.21%	100.00%

Source: Appendix L-1.

Note:

^a Total of vehicle mix percentage values rounded to the nearest one-hundredth.

Operation Noise Source Calculation Methodology – Reference Noise Levels

To estimate Proposed Project operational noise impacts, reference noise-level measurements were collected from similar types of activities to represent the noise levels expected with development of the Proposed Project. The reference noise-level measurements shown in Table 3.11-20 were used to estimate Proposed Project operational noise impacts. The projected noise levels assume the worst-case noise environment, with the loading dock activity, entry gate and truck movements, rooftop air conditioning, and trash enclosure activity all operating continuously. A detailed discussion of the methodology used to calculate the reference noise level for the noise sources identified in Table 3.11-20 is provided in Appendix L-1.

Table 3.11-20. Reference Noise-Level Measurements

Noise Source ^a	Noise Source Height (Feet)	Minutes per Hour ^b		Reference Noise Level (dBA L_{eq}) at 50 feet	Sound Power Level (dBA) ^c
		Daytime	Nighttime		
Loading dock activity	8	60	60	65.7	111.5
Entry gate and truck movements	8	N/A ^d	N/A ^d	58.0	89.7
Rooftop air-conditioning units	5	39	28	57.2	88.9
Trash enclosure activity	5	5	5	57.3	89.0

Source: Appendix L-1.

Notes: dBA = A-weighted decibel; L_{eq} = energy equivalent sound level; daytime = 8:00 a.m.–10:00 p.m.; nighttime = 10:00 p.m.–8:00 a.m.; N/A = not applicable.

^a As measured by Urban Crossroads.

^b Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the project site.

^c Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources.

^d Entry gate and truck movements were calculated based on the number of events by time of day (refer to Table 3.11-46).

Reference Measurement Procedures

The reference noise level measurements presented in this section were collected using a Larson Davis LxT Type 1 precision sound level meter (serial number 01146). The LxT sound level meter was calibrated using a Larson-Davis calibrator, Model CAL 200, was programmed in slow mode to record noise levels in A-weighted form and was located at approximately 5 feet above ground level for each measurement. The sound level meters and microphones were

equipped with a windscreen during all measurements. All noise level measurement equipment used satisfies the ANSI standard specifications for sound level meters (ANSI S1.4-2014/IEC 61672-1:2013).

Operational Noise Prediction Model

The exterior on-site operational noise sources were incorporated within a three-dimensional computerized noise simulation model, CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate project site plan, georeferenced aerial imagery, topography, buildings, and barriers in the prediction of outdoor noise levels. The International Standards Organization (ISO) 9613 standard for the propagation of sound within the environment, was employed within the CadnaA model to account for the distance from each noise source to sensitive receptor location, partially intervening barrier or building, ground absorption, temperature, and humidity to provide a summary of noise levels at each receiver and the noise level contributions by the noise sources. Further information on the CadnaA modeling assumptions, inputs and outputs is provided in Appendix L-1.

Construction Noise and Vibration

Construction-related noise effects were assessed with respect to nearby noise-sensitive receptors and their relative exposure, based on application of FHWA Roadway Construction Noise Model (RCNM) and FTA reference noise level data. Maximum noise levels from various types of construction equipment along with an acoustical usage factor for each type of equipment or operation are included in the RCNM and FTA reference data and provided in Table 3.11-21. Construction noise levels were predicted using reference noise emission data and operational parameters contained in the FHWA RCNM and the FTA guidance manual, the default construction fleet assumptions used in the air quality analysis, and the ISO 9613 propagation algorithms within the CadnaA noise modeling software as previously described.

Table 3.11-21. Reference Noise Levels from Construction Equipment

Equipment Type	Maximum Noise Levels, L_{max} (dBA) at 50 feet	Acoustical Use Factor (%)
Air compressor	78-80	40
Asphalt paver	77-85	50
Backhoe	78-80	40
Compactor	80-83	20
Concrete pump	81-82	20
Crane	82-85	16
Dozer	83-85	40
Forklift	79-80	40
Front-end loader	70-81	40
Generator	85	50
Grader	85	40
Pneumatic tools	81-85	50
Rock drill	80-85	20
Roller	84-85	20
Scraper	74-84	40
Trucks	77-81	40

Table 3.11-21. Reference Noise Levels from Construction Equipment

Equipment Type	Maximum Noise Levels, L _{max} (dBA) at 50 feet	Acoustical Use Factor (%)
Water pump	73–74	50
Welder	78–80	40

Sources: DOT 2006; FHWA 2008; FTA 2018.

Notes: L_{max} = maximum measured noise level; dBA = A-weighted decibel.

All equipment fitted with a properly maintained and operational noise control device, per manufacturer's specifications.

Vibration Methodology

This analysis focuses on the potential groundborne vibration associated with vehicular traffic and construction activities. Groundborne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. However, due to the rapid drop-off rate of groundborne vibration and the short duration of the associated events, vehicular-traffic-induced groundborne vibration is rarely perceptible beyond the roadway right-of-way and rarely results in vibration levels that cause damage to buildings in the vicinity.

Although vehicular traffic vibration is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the construction activities and equipment used. Ground vibration levels associated with various types of construction equipment are summarized in Table 3.11-22. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the human response (annoyance) using vibration assessment methods defined by FTA. To describe the human response (annoyance) associated with vibration impacts, FTA provides the following equation (FTA 2018):

$$PPV_{\text{equip}} = PPV_{\text{ref}} \times (25/D)^{1.5}$$

Table 3.11-22. Vibration Source Levels for Construction Equipment

Equipment	Vibration Levels at 25 Feet	
	VdB	In/sec PPV
Small bulldozer	58	0.003
Jackhammer	79	0.035
Loaded truck	86	0.076
Large bulldozer	87	0.089

Source: FTA 2018.

Notes: VdB = vibration decibels; in/sec = inches per second; PPV = peak particle velocity.

Aircraft Noise Levels

Aircraft flight operations associated with the Proposed Project were modeled using the FAA AEDT, Version 3e; employing this model, Dudek generated aircraft noise contours and single-point prediction receivers for the Proposed Project average and peak (a.k.a., holiday) commercial air cargo operations.

To define the pre-Project or baseline aviation noise environment, this EIR relies upon the Draft KC-46A EIS, which includes a figure (3-1) illustrating baseline noise levels associated with March ARB operations. The Draft KC-46A EIS also includes corresponding predicted baseline aviation levels at a small set of receptor positions that serves

its purpose, but at locations that are dissimilar to those studied herein for the needs of assessing the Proposed Project. Since the modeling methodology and detailed input parameters for the KC-46A EIS are not available at the time of this EIR preparation, Dudek developed a three-dimensional (3-D) sound propagation model, based on relevant ISO 9613-2 algorithms and reference data, in an effort to reasonably emulate the KC-46A EIS output results and thus extrapolate predicted results at receptor locations R5–R15. The emulator considers the aggregate source of sound emission largely as a row of adjoining point-emission sources colinear with the March ARB runways, at varying elevations above grade in a manner approximating aircraft takeoffs and landings. Successive iterations of the emulator calculations refined these sources and resulted in noise contours that resemble those of the Draft KC-46A EIS baseline aviation noise contours. To help demonstrate the validity of this emulation technique for the limited purpose of this noise assessment, Table 3.11-23 shows the comparison of the emulator prediction results at multiple sample receptor positions surrounding March ARB with predicted CNEL values at the same locations as appearing in Table 3-4 of the Draft KC-46A EIS. For purposes of comparison, Draft KC-46A EIS Location 9 (Catholic Church Sagrado Corazon de Jesus) is within the same block as receptor locations R5-R14 (see Table 3.11-4).

Table 3.11-23. Comparison of Baseline Aviation Noise Prediction Results

Draft KC-46A EIS Location Tag and Description	Aircraft Noise Level (dBA CNEL)		
	Draft KC-46A EIS Prediction	Emulator	Decibel Difference (dB)*
1. Tweed Pediatrics	52	52.9	-0.9
2. March Field Park Community Center	52.2	53.3	-1.1
3. Riverside National Cemetery Medal of Honor Memorial Site	59	57.8	1.2
5. Rainbow Ridge Elementary School	48.8	48.7	0.1
6. March Middle School	48	47.4	0.6
7. Serrano Elementary School	45.5	44.9	0.6
9. Catholic Church Sagrado Corazon de Jesus	58.3	59.7	-1.4
11. Breakthrough Church of God in Christ	51.4	51.8	-0.4

Source: DAF 2024; Dudek 2024.

Notes: Draft KC-46A EIS = KC-46A Main Operating Base 5 (MOB 5) Beddown Environmental Impact Statement; dBA = A-weighted decibel; CNEL = community noise equivalent level; dB = decibel.

* KC 46A MOB 5 Beddown Prediction minus Emulator.

Decibel differences between the emulator-predicted CNEL and the Draft KC-46A EIS-published CNEL values that are less than 3 dB could reasonably be considered barely perceptible. Most of the differences shown in Table 3.11-23, however, are approximately or less than 1 dB, which would be considered an imperceptible difference and would support an assertion of close and sufficient agreement between the models for purposes of application in this predictive noise assessment.

Using a similar technique, and for the purpose of generating noise contours representing the logarithmic summation of baseline and Project-attributed aviation traffic noise contribution, the AEDT-based prediction model results for the two Proposed Project cargo aviation noise scenarios (average and peak) were also emulated, and the decibel differences at receivers R5 through R15 for one of the two scenarios (i.e., average) are presented in Table 3.11-24. Like the emulation of the baseline aviation noise contours, the differences for the Proposed Project models are less than 3 dB, with an average difference of 0.6 dB, and thus show adequate agreement for purposes of generating noise contours that include Proposed Project cargo aviation acoustical contribution in this noise impact assessment.

Table 3.11-24. Comparison of Proposed Project Cargo (Average) Aviation Noise Prediction Results

Receptor Tag	Aircraft Noise Level (dBA CNEL)		
	AEDT 3e Prediction Result	Emulator	Decibel Difference (dB)*
R5	61	59.3	1.7
R6	59	59.0	0.0
R7	59	58.9	0.1
R8	58	58.5	0.5
R9	58	58.8	-0.8
R10	58	58.2	-0.2
R11	57	57.5	-0.5
R12	56	58.3	-2.3
R13	56	58.5	-2.5
R14	56	57.1	-1.1
R15	53	52.2	0.8
Average decibel difference			0.6

Source: Dudek 2024.

Notes: dBA = A-weighted decibel; CNEL = community noise equivalent level; dB = decibel.

* AEDT 3e Prediction minus Emulator.

To calculate baseline-plus-Project aviation noise levels at the studied receptor locations, the predicted values from the baseline emulator and the Project case emulator are then simply added together logarithmically. Given the structure of the emulator that accommodates calculation of values across a two-dimensional output array of more than 70,000 cells, the same technique has been used to produce noise contour figures depicting baseline-plus-Project aviation noise levels for each of these two studied Project scenarios.

For evaluation of March JPA's "sleep disturbance" threshold of significance (refer to Threshold NOI-4 in Section 3.11.5, Impacts Analysis), the probability of nighttime awakenings was estimated using the methodology provided in the voluntary standard jointly developed and adopted by the Acoustical Society of America (ASA) and ANSI: Technical Report ASA TR S 12.9-2008/Part 6, Methods for Estimation of Awakenings Associated with Outdoor Noise Events Heard in Homes (ANSI and ASA 2008).

Sensitive Receiver Locations

Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multifamily dwellings, hotels, motels, dormitories, outpatient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminal land uses.

To describe the potential off-site Proposed Project noise levels generated due to Project-related vehicular traffic increases on the area roadways, long-term operations, and construction activities, four prediction receiver locations representing the nearby sensitive receptors were identified (prediction receivers R1–R4) are shown on Figure 3.11-5, Receiver Locations – Ground-Level Noise. Prediction receivers R5–R15 are representative of sensitive receptors located to the south and west of March ARB/Inland Port Airport, which would experience the greatest impact from Project-related aircraft operations. These prediction receivers were selected to evaluate Project-related aircraft noise levels and are shown on Figure 3.11-6, Receiver Locations – Aircraft Operational Noise. Due to these geographic differences in noise impacts, ground operational and construction noise and aircraft operational noise are evaluated separately.

All distances were measured from the project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever was closer to the project site. Distance was measured in a straight line from the project site boundary to each receiver location. The selection of receiver locations was based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and FTA. Other sensitive land uses in the Proposed Project study area that are located at greater distances than those identified herein would experience noise levels lower than those presented here due to the additional attenuation from distance and the shielding of intervening structures.

Traffic, Operational, and Construction Receivers

- **R1:** Location R1 represents the existing noise-sensitive residence at 24307 Carman Lane, approximately 3,140 feet northeast of the project site. R1 is in the private outdoor living area (backyard) facing the project site behind an existing 6-foot-high wall. A 24-hour noise measurement was taken near this location (L1) to describe the existing ambient noise environment.
- **R2:** Location R2 represents La Iglesia Misionera Cristiana at 16220 Indian Street, approximately 3,166 feet northeast of the project site. Receiver R2 is at the residential building façade because there are no private outdoor living areas (backyards) facing the project site. A 24-hour noise measurement was taken near this location (L2) to describe the existing ambient noise environment.
- **R3:** Location R3 represents the existing noise-sensitive residence at 16537 Libra Lane, approximately 90 feet south of the project site. R3 is in the private outdoor living area (backyard) facing the project site behind an existing 6-foot-high wall. A 24-hour noise measurement near this location (L2) is used to describe the existing ambient noise environment.
- **R4:** Location R4 represents the existing noise-sensitive residence at 16855 Baltic Court, approximately 2,821 feet southeast of the project site. R4 is in the private outdoor living area (backyard) facing the project site behind an existing 6-foot-high wall. A 24-hour noise measurement near this location (L3) is used to describe the existing ambient noise environment.

Aircraft Noise Receivers

- **R5:** Location R5 represents the existing noise-sensitive residence at the southwest corner of the intersection of Markham Street and Brennan Avenue, at 617 West Markham Street, in the City of Perris, California. The parcel is zoned residential and located approximately 4,460 feet south of the end of Runway 32, and approximately 8,780 feet from the southwestern project site boundary. Moreover, the western boundary of the noise-sensitive residential parcel represented by this receiver is located approximately 90 feet west of the centerline of the flight path of Runway End 32. A 24-hour noise measurement was performed at this location (L5) and is used to describe the existing ambient noise environment.

- **R6–R14:** Locations R6 through R14 represent the existing noise-sensitive residences along Markham Street or Brennan Avenue, facing the flight path of the Runway 32 end of March ARB/Inland Port Airport, located at distances greater than that to R5. The receivers representing these noise-sensitive residential uses are located approximately 4,250 feet to 5,250 feet from the southern end of Runway 32. Moreover, the receivers representing these noise-sensitive residential receptors are located between 230 feet and 540 feet from the centerline of the flight path of Runway End 32.
- **R15:** Prediction receiver location R15 represents the existing noise-sensitive residence at 1341 West Oleander Avenue in the City of Perris, California. The parcel is zoned light industrial–special but appears to currently be occupied as a residence. It is located approximately 2,950 feet southwest of the end of Runway 32 and approximately 5,715 feet from the southwestern project site boundary. An additional light industrial–special parcel with what appears to be a residential structure, that is currently in use as commercial/light-industrial office, is located at the southwest corner of the intersection of Harley Knox Boulevard and Patterson Avenue.
- **R16–R20:** These representative residential receivers are located north of Alessandro Boulevard, and thus north of March ARB/Inland Port Airport, for purposes of evaluating potential sleep disturbance.

3.11.4 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project’s potential impacts related to noise are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, as applicable, the March JPA CEQA Guidelines (March JPA 2022). For the purposes of the analysis in this EIR, a significant impact related to noise would occur if the Proposed Project would result in:

NOI-1 *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*

NOI-2 *Generation of excessive groundborne vibration or groundborne noise levels.*

NOI-3 *For a project located within the vicinity of a private airstrip or 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, expose people residing or working in the project area to excessive noise levels.*

NOI-4 *Aircraft operations (i.e., aircraft landings and/or takeoffs) at the March Inland Port Airport between 10:00 p.m. and 6:59 a.m. that could expose people within the March Inland Port Airport’s vicinity to a significant risk of sleep disturbance due to noise, as based on a single event noise exposure level analysis.*

Significant Increase Thresholds

Relevant to the CEQA Appendix G Guidelines for Threshold NOI-1 (temporary or permanent increase in ambient noise levels), the March JPA and Moreno Valley General Plans provide direction on noise compatibility criteria, relevant to assess the significance of overall noise impacts, based on land use compatibility and their sensitivity to absolute noise levels. However, under CEQA, consideration must be given to the magnitude of the increase, relative to the existing ambient noise level environment, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. However, the March JPA and Moreno Valley

General Plans do not define the level at which increases in noise levels, relative to the existing ambient environment, would be considered a significant impact.

Noise-level increases resulting from the Proposed Project were evaluated based on the existing ambient sound levels at the noise-sensitive receiver locations nearest the project site. An important way of determining a person's subjective reaction to an emergent noise is through comparison against the existing ambient noise environment to which they have become accustomed. Research assessing the percentage of people who are highly annoyed by changes in ambient noise levels has indicated that when ambient noise levels are relatively low (below 60 dBA CNEL/ L_{dn}), a greater change in the ambient noise level is needed to elicit a response. But as existing background/ambient noise levels increase, a smaller change in ambient noise levels is required to result in significant annoyance (FICON 1992).

Based on the research assessing human response to changes in noise levels, the Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels, which was later refined by FAA, that vary considering the existing ambient noise level. Although the FICON guidance was originally developed to assess aircraft noise impacts, the recommendations are often used in environmental noise impact assessments involving the use of long-term/cumulative noise exposure metrics (24 hours or greater), such as the average day-night level (DNL/ L_{dn}) or CNEL. FICON concludes that "federal agencies generally conduct noise assessments at DNL levels of ≥ 65 dB," and that exposure to levels in excess of 65 dB DNL is one of the ways to summarize impacts (FICON 1992). March ARB/Inland Port Airport ALUCP Policy MA.2.3(a) sets 65 dB as the normally acceptable CNEL for new residential land uses in the vicinity of March ARB/Inland Port Airport. The Draft KC-46A EIS also uses 65 dBA DNL as an assessment criterion, such as in the context of environmental justice (DAF 2024). For these reasons, Project-attributed increases to the existing or baseline aviation sound environment that cause a resulting DNL or CNEL that exceeds 65 dBA would be considered a significant impact. However, where baseline aviation noise levels already exceed this threshold, or if the predicted future noise is lower than 65 dBA CNEL but represents a potentially substantial increase to the existing outdoor sound environment, FICON provides additional guidance on allowable dB increase depending on these conditions.

FICON identifies that a project-related operational noise increase of 5 dB or greater is typically interpreted as a readily perceptible change and would be considered a significant impact. Also, per FICON, in areas where the existing ambient noise levels range from 60 to 65 dBA, a 3 dB noise level increase would be a barely perceptible change in outdoor environments, but still considered significant under some jurisdictions. For areas with existing ambient noise levels already exceeding 65 dBA, an increase in community noise levels of 1.5 dB or greater is considered a significant impact, because it is likely to further contribute to an environment where noise exposure is already elevated. Table 3.11-25 provides a summary of the noise impact significance criteria for permanent noise increases associated with the Proposed Project, based on guidance from FICON. These levels of increases and their perceived acceptance are consistent with guidance provided by both the FHWA (DOT 2011) and Caltrans (Caltrans 2013).

For evaluation of temporary, short-term noise generated by construction activities, the temporary or periodic noise level increases over the existing ambient conditions must be considered under CEQA Threshold NOI-1. The Caltrans Traffic Noise Analysis Protocol identifies a 5 dB L_{eq} increase as a significance threshold for assessment of temporary noise level increases (i.e., construction-related noise) (Caltrans 2020). If the Project-related construction activities would generate a temporary noise level increase of 5 dB L_{eq} or more above the existing ambient noise levels, then the Project-generated construction noise would be considered a significant impact. Although the Caltrans significant increase recommendations were specifically developed to assess traffic noise impacts, the 5 dB L_{eq} substantial increase threshold is used to address noise-level increases relating to temporary/short-term operations.

CEQA Threshold NOI-4 evaluates potential sleep disturbance due to aircraft operations between 10:00 p.m. and 6:59 a.m. (7:00 a.m. in this EIR). Based on ASA/ANSI guidance that was updated in 2018, replacing the 2008 guidance used in prior March ARB studies (Appendix L-2), separate formulas have been used for calculating sleep disturbances for residents that have become accustomed to military and civilian operations at March ARB/Inland Port Airport, and for those new to the area and not acclimated to aircraft noise events. This analysis uses a single-event noise exposure level. Acclimation occurs in steady-state situations where the noise has been present in both level and in frequency of occurrence for at least a year (Appendix L-2). FAA has begun a national sleep study on the effects of aircraft noise on sleep, with the primary outcome of the study is expected to be an exposure-response function between the instantaneous, maximum A-weighted sound pressure levels (dBA) of individual aircraft measured in the bedroom and awakening probability inferred from changes in heart rate and body movement (Basner et al. 2023). Although FAA has not adopted a numeric threshold for percentage increase in sleep disturbance, the sleep study states that awakening probability attributable to noise at the highest levels experienced in the bedroom is typically approximately 10%. Therefore, a sleep disturbance increase of 10% is used as the threshold to evaluate impacts to sleep disturbance due to airport operations between 10:00 p.m. and 7:00 a.m.

Significance Criteria Summary

Noise impacts would be considered significant if the conditions presented in Table 3.11-25 would occur as a direct result of the proposed development.

Table 3.11-25. Significance Threshold Summary Matrix

Analysis	Land Use	Jurisdiction	Conditions	Significance Criteria	
				Daytime	Nighttime
Construction	Noise-Sensitive	March JPA	Permitted hours 7:00 a.m. to 7:00 p.m. ^a		
		Moreno Valley	200 feet from the source property line	65 dBA Leq	60 dBA Leq
		All	Noise level increase above existing ambient	5 dB increase	
		All	Vibration level threshold ^b	78 VdB (0.3 in/sec PPV)	N/A
Aviation Noise	Noise-Sensitive	All ^c	Project aviation noise contribution causes exceedance of 65 dBA DNL/CNEL	65 dBA DNL/CNEL	
Operational Noise	Noise-Sensitive	March JPA ^d	Noise level threshold	55 dBA Leq	
		Moreno Valley	Exterior noise standards ^e	65 dBA Leq	60 dBA Leq
		All ^f	If ambient is <60 dBA Leq	≥5 dB CNEL project increase	
			If ambient is 60–65 dBA Leq	≥3 dB CNEL project increase	
			If ambient is >65 dBA Leq	≥1.5 dB CNEL project increase	
March JPA	Sleep disturbance	N/A	10% increased chance of awakening		
		All	If ambient is <60 dBA CNEL	≥5 dB CNEL project increase	

Table 3.11-25. Significance Threshold Summary Matrix

Analysis	Land Use	Jurisdiction	Conditions	Significance Criteria	
				Daytime	Nighttime
Off-Site Traffic Noise	Noise-Sensitive ^f	March JPA	If ambient is 60–65 dBA CNEL	≥3 dB CNEL project increase	
			If ambient is >65 dBA CNEL	≥1.5 dB CNEL project increase	
	If ambient is <70 dBA CNEL		≥5 dB CNEL project increase		
	If ambient is >70 dBA CNEL		≥3 dB CNEL project increase		
	Non-Noise-Sensitive ^g				

Sources: Appendices L-1, L-2; Caltrans 2020.

Notes: Daytime = 8:00 a.m. to 10:00 p.m.; nighttime = 10:00 p.m. to 8:00 a.m.; dBA = A-weighted decibel; CNEL = community noise equivalent level; JPA = Joint Powers Authority; L_{eq} = energy equivalent level; N/A = not applicable; VdB = vibration decibel; in/sec PPV = inches per second peak-particle velocity.

^a March JPA, Development Code, Chapter 9.10 Performance Standards, Section 9.10.030.

^b FTA 2018.

^c March ARB/Inland Port Airport ALUCP, Policy MA.2.3(a).

^d March JPA, Development Code, Chapter 9.10 Performance Standards, Section 9.10.140.

^e City of Moreno Valley Municipal Code, Chapter 11.80 Noise Regulation.

^f FICON 1992.

^g OPR land use/noise compatibility standards.

3.11.5 Impacts Analysis

Threshold NOI-1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less-Than-Significant Impact. Noise-generating activities associated with the Proposed Project would include short-term construction; long-term operational noise associated with the cargo center operations other on-site noise sources (e.g., heating, ventilation, and air conditioning equipment), and off-site traffic noise. Aviation noise attributed to the Proposed Project is evaluated under Threshold NOI-3.

Construction Impacts

This section analyzes potential impacts resulting from short-term construction activities associated with development of the Proposed Project. Figure 3.11-7, Construction Noise Source Locations, shows the construction noise source locations in relation to the nearest sensitive receiver locations.

Noise generated by Proposed Project construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. As a result of the equipment mix, each stage has its own noise characteristics; some stages have higher continuous noise levels than others, and some have higher impact noise levels than others. The number and mix of construction equipment is expected to occur in the following stages:

- Site preparation
- Grading

- Building construction
- Paving
- Architectural coating

As previously discussed, the construction noise analysis was prepared using reference noise levels and modeling techniques contained in the FHWA RCNM program and FTA guidance manuals, to predict typical construction activity noise levels for each stage of Proposed Project construction. The construction reference noise-level measurements represent typical construction activity noise levels.

Construction Reference Noise Levels

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Proposed Project construction noise-level impacts at the nearby sensitive receiver locations were completed. Consistent with FTA guidance for general construction noise assessment, Table 3.11-26 presents the combined noise levels for the loudest construction equipment, assuming they are in operation at the same time. Appendix L-1 includes the detailed CadnaA construction noise model inputs.

Table 3.11-26. Typical Construction Noise Levels

Construction Stage	Reference Construction Activity ^a	Reference Noise Level at 50 Feet (dBA L_{eq})	Combined Noise Level (dBA L_{eq})
Site preparation	Crawler tractors	78	80
	Hauling trucks	72	
	Rubber-tired dozers	75	
Grading	Graders	81	83
	Excavators	77	
	Compactors	76	
Building construction	Cranes	73	81
	Tractors	80	
	Welders	70	
Paving	Pavers	74	83
	Paving equipment	82	
	Rollers	73	
Architectural coating	Cranes	73	77
	Air compressors	74	
	Generator sets	70	

Source: Appendix L-1.

Notes: dBA = A-weighted decibel; L_{eq} = energy equivalent sound level.

^a Reference construction noise-level measurements taken by Urban Crossroads.

To assess the worst-case construction noise levels, the Proposed Project construction noise analysis relied on the highest noise-level impacts when the equipment with the highest reference noise level is operating at the closest point from the edge of primary construction activity (project site boundary) to each receiver location. As shown on Table 3.11-27, the highest construction noise levels are expected to range from 32.0 to 42.4 dBA L_{eq} at the nearby receiver locations.

Table 3.11-27. Construction Equipment Noise Level Summary

Receiver Location ^a	Construction Noise Levels (dBA L _{eq})					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels ^b
R1	35.0	38.0	36.0	38.0	32.0	38.0
R2	39.4	42.4	40.4	42.4	36.4	42.4
R3	36.4	39.4	37.4	39.4	33.4	39.4
R4	36.6	39.6	37.6	39.6	33.6	39.6

Source: Appendix L-1

Notes: dBA = A-weighted decibel; L_{eq} = energy equivalent sound level.

^a Construction noise receiver locations are shown in Figure 3.11-7.

^b Construction noise-level calculations based on distance from the project site boundaries (construction activity area) to the nearest receiver locations.

Typical Construction Noise Level Compliance

The construction noise analysis shows that the nearest receiver locations would not exceed the City of Moreno Valley’s daytime 65 dBA L_{eq} significance threshold during Proposed Project construction activities, as shown in Table 3.11-28. Therefore, noise impacts due to Proposed Project construction would be **less than significant**.

Table 3.11-28. Typical Construction Noise Level Compliance

Receiver Location ^a	Construction Noise Levels (dBA L _{eq})		
	Highest Construction Noise Levels ^b	Threshold ^c	Threshold Exceeded? ^d
R1	38.0	65	No
R2	42.4	65	No
R3	39.4	65	No
R4	39.6	65	No

Notes: dBA = A-weighted decibel; L_{eq} = energy equivalent sound level.

^a Construction noise receiver locations are shown on Figure 3.11-7.

^b Highest construction noise-level calculations based on distance from the construction noise source activity to the nearest receiver locations, as shown on Figure 3.11-7.

^c Construction noise-level thresholds as shown in Table 3.11-25.

^d Do the estimated project construction noise levels exceed the construction noise-level threshold?

Nighttime Concrete Pouring Noise Analysis

Nighttime concrete-pouring activities may occur as part of Proposed Project construction activities. Nighttime concrete-pouring activities are often used to support reduced concrete mixer truck transit times and lower air temperatures than during daytime hours and would generally be limited to the actual building areas shown on Figure 3.11-8, Nighttime Concrete Pour Noise Source and Receiver Locations. Because the nighttime concrete pours may take place outside the permitted hours in March JPA Development Code Chapter 9.10, Performance Standards, Section 9.10.030, the project applicant would be required to obtain authorization for nighttime work from the March JPA. Table 3.11-29 shows that concrete-pouring activity (paving) noise would range from 37.6 to 42.4 dBA L_{eq} at the nearest sensitive receiver locations and would not exceed the applicable thresholds. Therefore, impacts would be **less than significant**.

Table 3.11-29. Nighttime Concrete Pouring Noise-Level Compliance

Receiver Location ^a	Construction Noise Levels (dBA L _{eq})		
	Paving Construction ^b	Nighttime Construction Standard ^c	Threshold Exceeded? ^d
R1	37.6	60	No
R2	42.4	60	No
R3	39.6	60	No
R4	40.1	60	No

Notes: dBA = A-weighted decibel; L_{eq} = energy equivalent sound level.

^a Noise receiver locations are shown in Figure 3.11-8.

^b Construction noise-level calculations based on distance from the center of Proposed Project construction activity to the property line of adjacent uses, as shown in Figure 3.11-8.

^c Construction noise-level standards as shown in Table 3.11-25.

^d Do the estimated Proposed Project construction noise levels exceed the construction noise level threshold?

Operational Noise Impact Analysis – Compliance with AICUZ and ALUCP

The noise contour boundaries used to determine the potential aircraft-related noise impacts at the project site are identified in the March ARB/Inland Port Airport ALUCP (County of Riverside 2014) and presented on Figure 3.11-9, March ARB/Inland Port Airport ALUCP Compatibility Map, along with the March ARB 2018 AICUZ noise level contours presented on Figure 3.11-4 (March ARB 2018). As shown on Figure 3.11-9, the project site is located within the B2 compatibility zone, high noise zone, as outlined in the March ARB/Inland Port Airport ALUCP (County of Riverside 2014). Zone B2, High Noise Zone, encompasses areas of high noise and moderate accident potential risk. As shown on Figure 3.11-4, March ARB 2018 AICUZ Noise Contours, the proposed cargo building would be partially located within the 65 to 70 dBA CNEL noise level contours. Under both the March ARB/Inland Port ALUCP and the March ARB 2018 AICUZ, the Proposed Project would be considered normally acceptable for the proposed use.

Operational Noise Impact Analysis – Ground Operations

This section analyzes the potential operational noise impacts of the Proposed Project at the nearest noise receiver locations associated with ground operations (R1–R4). Figure 3.11-10, Operational Noise Source Locations, identifies the noise source locations used to assess the operational noise levels associated with ground operations.

Operation Noise Sources

The ground operations noise analysis is intended to describe noise impacts associated with the expected typical daytime and nighttime activities at the project site. To present the potential worst-case noise conditions, the analysis assumes the Proposed Project would be operational 24 hours per day, 7 days per week. Proposed Project ground operations would primarily be conducted within the enclosed buildings, except for traffic movement, parking, and loading and unloading of trucks at designated loading bays. The on-site Proposed Project-related noise sources associated with ground operations would include loading dock activity, entry gate and truck movements, rooftop air conditioning, and trash enclosure activity.

Loading Dock

The reference noise level measurement was taken in the center of the loading dock activity area and represents multiple concurrent noise sources resulting in a combined noise level of 65.7 dBA L_{eq} at a uniform distance of 50 feet. Specifically, the reference noise level measurement represents one truck located approximately 30 feet from the noise level meter with another truck passing by to park roughly 20 feet away, both with their engines idling. Throughout the reference noise level measurement, a separate docked and running reefer truck was located approximately 50 feet east of the measurement location. Additional background noise sources included truck pass-by noise, truck drivers talking to each other next to docked trucks, and air brake release noise when trucks parked.

Entry Gate and Truck Movements

An entry gate and truck movements reference noise level measurement was taken over a 15-minute period and represents multiple noise sources producing a reference noise level of 58.0 dBA L_{eq} at 50 feet. The noise sources included at this measurement location account for the rattling and squeaking during normal opening and closing operations, the gate closure equipment, truck engines idling outside the entry gate, truck movements through the entry gate, and background truck court activities and forklift backup alarm noise.

Consistent with the Traffic Analysis (Appendix M-1), the Proposed Project is expected to generate a total of approximately 1,276 trip-ends per day (actual vehicles) and includes 276 truck trip-ends per day.⁵ This noise study relies on the actual Proposed Project trips (as opposed to the passenger car equivalents) to accurately account for the effect of individual truck trips on the study area roadway network. Using the estimated number of truck trips in combination with time-of-day vehicle splits, the number of entry gate and truck movements by driveway location was calculated.

Rooftop Air-Conditioning Units

The reference noise level represents a Lennox SCA120 series 10-ton model packaged air-conditioning unit. At the uniform reference distance of 50 feet, the reference noise level is 57.2 dBA L_{eq} . Based on the typical operating conditions observed over a 4-day measurement period, the rooftop air-conditioning units are estimated to operate for an average 39 minutes per hour during the daytime hours, and 28 minutes per hour during the nighttime hours. These operating conditions reflect peak summer cooling requirements with measured temperatures approaching 96°F, with average daytime temperatures of 82°F. For this noise analysis, the air-conditioning units are expected to be located on the roof of the Proposed Project buildings.

Trash Enclosure Activity

The measured reference noise level at the uniform 50-foot reference distance is 57.3 dBA L_{eq} for the trash enclosure activity. The trash enclosure activity noise levels include two metal gates opening and closing, metal scraping against concrete floor sounds, dumpster movement on metal wheels, trash dropping into the metal dumpster, and background parking lot vehicle movements. Noise associated with trash enclosure activities is conservatively expected to occur for 10 minutes per hour.

⁵ *Trip-ends* refers to the expected number of vehicles using a parking area.

Modeled Proposed Project Operational Noise Levels

Using the reference noise levels identified in Table 3.11-20 to represent Proposed Project operations, the operational source noise levels that are expected to be generated at the project site and the Proposed Project-related noise level increases that would be experienced at each of the sensitive receiver locations were calculated. Table 3.11-30 shows the Proposed Project operational noise levels during the daytime hours of 8:00 a.m. to 10:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 25.0 to 36.9 dBA L_{eq} .

Table 3.11-30. Daytime Project Operational Noise Levels

Noise Source ^a	Operational Noise Levels by Receiver Location (dBA L_{eq})			
	R1	R2	R3	R4
Loading dock activity	23.9	35.9	36.0	36.8
Entry gate and truck movements	17.8	22.7	20.3	21.0
Rooftop air conditioning units	6.6	11.5	8.7	9.3
Trash enclosure activity	4.8	9.8	7.3	8.1
Total (All Noise Sources)	25.0	36.1	36.1	36.9

Notes: dBA = A-weighted decibel; L_{eq} = energy equivalent sound level.

^a Refer to Figure 3.11-10 for the noise source locations. CadnaA noise model calculations are included in Appendix L-1.

Table 3.11-31 shows the Proposed Project operational noise levels during the nighttime hours of 10:00 p.m. to 8:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 24.1 to 36.8 dBA L_{eq} . The differences between the daytime and nighttime noise levels are largely related to the duration of noise activity, which are shown in Table 3.11-20.

Table 3.11-31. Nighttime Project Operational Noise Levels

Noise Source ^a	Operational Noise Levels by Receiver Location (dBA L_{eq})			
	R1	R2	R3	R4
Loading dock activity	23.9	35.9	36.0	36.8
Entry gate and truck movements	8.7	13.7	11.3	12.0
Rooftop air-conditioning units	5.6	10.5	7.8	8.4
Trash enclosure activity	3.8	8.8	6.3	7.2
Total (All Noise Sources)	24.1	35.9	36.0	36.8

Notes: dBA = A-weighted decibel; L_{eq} = energy equivalent sound level.

^a Refer to Figure 3.11-10 for the noise source locations. CadnaA noise model calculations are included in Appendix L-1.

Proposed Project Operational Noise Level Compliance

To demonstrate compliance with local noise regulations, the Proposed Project-only operational noise levels were evaluated against exterior noise-level thresholds based on the March JPA and Moreno Valley exterior noise-level standards at the nearest noise-sensitive receiver locations. Table 3.11-32 shows that the operational noise levels associated with the Proposed Project would not exceed the City of Moreno Valley's 65 dBA L_{eq} daytime or 60 dBA L_{eq} nighttime exterior noise-level standards at any of the nearest receiver locations and would not exceed the March JPA 55 dBA L_{eq} daytime or nighttime exterior noise-level standards at any of the nearest receiver locations.

Table 3.11-32. Operational Noise Level Compliance

Receiver Location ^a	Project Operational Noise Levels (dBA L _{eq}) ^b		Noise Level Standards (dBA L _{eq}) ^c		Noise Level Standards Exceeded? ^d	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	25.0	24.1	55	55	No	No
R2	36.1	35.9	55	55	No	No
R3	36.1	36.0	55	55	No	No
R4	36.9	36.8	55	55	No	No

Notes: dBA = A-weighted decibel; L_{eq} = energy equivalent sound level daytime = 8:00 a.m.–10:00 p.m.; nighttime = 10:00 p.m.–8:00 a.m.

- ^a Refer to Figure 3.11-10 for the receiver locations.
- ^b Proposed Project operational noise levels as shown in Tables 3.11-30 and 3.11-31.
- ^c March Joint Powers Authority, Development Code, Chapter 9.10 Performance Standards, Section 9.10.140.
- ^d Do the estimated Proposed Project operational noise source activities exceed the noise level standards?

Proposed Project Operational Noise Level Increases

To describe the Proposed Project operational noise level increases, the Proposed Project operational noise levels were combined with the existing ambient noise-level measurements for the nearest receiver locations potentially impacted by Proposed Project operational noise sources. As indicated in Tables 3.11-33 and 3.11-34, the Proposed Project would not generate a measurable daytime or nighttime operational noise-level increase at the nearest receiver locations. Proposed Project-related operational noise-level increases would not exceed the operational noise-level increase significance criteria presented in Table 3.11-25 during the daytime or nighttime hours. Therefore, ground operation noise impacts would be **less than significant**.

Table 3.11-33. Daytime Project Operational Noise-Level Increases

Receiver Location ^a	Total Project Operational Noise Level ^b	Measurement Location ^c	Reference Ambient Noise Levels ^d	Combined Project and Ambient ^e	Project Increase ^f	Increase Criteria ^g	Increase Criteria Exceeded?
R1	25.0	L1	65.6	65.6	0.0	1.5	No
R2	36.1	L2	60.9	60.9	0.0	3.0	No
R3	36.1	L2	60.9	60.9	0.0	3.0	No
R4	36.9	L3	58.5	58.5	0.0	5.0	No

Notes:

- ^a Refer to Figure 3.11-10 for the receiver locations.
- ^b Total Proposed Project daytime operational noise levels as shown in Table 3.11-30 (dBA L_{eq}).
- ^c Reference noise-level measurement locations as shown in Figure 3.11-10.
- ^d Observed daytime ambient noise levels as shown in Table 3.11-2 (dBA L_{eq}).
- ^e Represents the combined ambient conditions plus Proposed Project activities (dBA L_{eq}).
- ^f The noise-level increase expected with the addition of Proposed Project activities.
- ^g Significance increase criteria as shown in Table 3.11-25.

Table 3.11-34. Nighttime Project Operational Noise-Level Increases

Receiver Location ^a	Total Project Operational Noise Level ^b	Measurement Location ^c	Reference Ambient Noise Levels ^d	Combined Project and Ambient ^e	Project Increase ^f	Increase Criteria ^g	Increase Criteria Exceeded?
R1	24.1	L1	62.6	62.6	0.0	3.0	No
R2	35.9	L2	58.7	58.7	0.0	5.0	No
R3	36.0	L2	58.7	58.7	0.0	5.0	No
R4	36.8	L3	53.9	54.0	0.1	5.0	No

Notes:

- ^a Refer to Figure 3.11-10 for the receiver locations.
- ^b Total Proposed Project nighttime operational noise levels as shown in Table 3.11-31 (dBA L_{eq}).
- ^c Reference noise-level measurement locations as shown in Figure 3.11-10.
- ^d Observed nighttime ambient noise levels as shown in Table 3.11-2 (dBA L_{eq}).
- ^e Represents the combined ambient conditions plus the Proposed Project activities (dBA L_{eq}).
- ^f The noise level increase expected with the addition of Proposed Project activities.
- ^g Significance increase criteria as shown in Table 3.11-25.

Off-Site Traffic Noise Analysis

To assess the off-site transportation noise level impacts associated with operation of the Proposed Project, traffic noise levels were calculated based on the Traffic Analysis (Appendix M-1) using the assumptions and methodology previously outlined in Section 3.11.3, Methodology. Noise contours were developed from the modeled traffic noise levels to assess the Proposed Project's incremental 24-hour dBA CNEL traffic-generated noise impacts at land uses adjacent to roadways affected by Proposed Project traffic. The noise contours represent the distance to noise levels of a constant value and were measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they do not reflect noise contributions from the surrounding stationary noise sources currently present in the Proposed Project study area.

Tables 3.11-35 through 3.11-46 present a summary of the exterior dBA CNEL traffic noise levels without barrier attenuation. Roadway segments were analyzed from the following Proposed Project conditions:

- Existing
- Existing Plus Project (Non-Peak) Conditions
- Existing Plus Project (Peak) Conditions
- Opening Year Cumulative (2026) without Project Conditions
- Opening Year Cumulative (2026) with Project (Non-Peak) Conditions
- Opening Year Cumulative (2026) with Project (Peak) Conditions
- Horizon Year (2045) without Project, without Heacock Street Extension Conditions
- Horizon Year (2045) with Project (Non-Peak), without Heacock Street Extension Conditions
- Horizon Year (2045) with Project (Peak), without Heacock Street Extension Conditions
- Horizon Year (2045) without Project, with Heacock Street Extension Conditions
- Horizon Year (2045) with Project (Non-Peak), with Heacock Street Extension Conditions
- Horizon Year (2045) with Project (Peak), with Heacock Street Extension Conditions

A summary of the modeled traffic noise contours for each of the traffic scenarios is included in Appendix L-1.

Table 3.11-35. Existing without Project Contours

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	77.3	152	328	708
2	Heacock St.	South of Iris Ave.	Non-Sensitive	75.1	109	235	507
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	75.4	114	247	531
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	33.6	N/A	N/A	N/A
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	73.4	74	160	344
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	79.9	250	539	1,162
7	Cactus Ave.	East of Heacock St.	Sensitive	76.8	125	270	581
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	74.3	124	267	575
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	71.4	79	171	369

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-36. Existing with (Non-Peak) Project Contours

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	77.3	153	329	709
2	Heacock St.	South of Iris Ave.	Non-Sensitive	75.1	110	236	509
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	75.9	124	266	574
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	33.6	N/A	N/A	N/A
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	74.1	83	179	385
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	79.9	251	540	1,163
7	Cactus Ave.	East of Heacock St.	Sensitive	76.8	125	270	582
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	74.7	133	286	615
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	71.4	79	171	369

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-37. Existing with (Peak) Project Contours

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	77.3	153	330	710
2	Heacock St.	South of Iris Ave.	Non-Sensitive	75.1	110	237	510
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	76.1	128	275	593
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	33.6	N/A	N/A	N/A
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	74.4	87	188	404
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	79.9	251	540	1,163
7	Cactus Ave.	East of Heacock St.	Sensitive	76.8	125	270	582
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	74.9	137	294	634
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	71.4	79	171	369

Source: Appendix L-1

Notes: N/A = Heacock Street Extension not yet built.

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-38. Opening Year Cumulative without Project Contours

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	78.4	182	391	843
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	173	373	803
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.2	177	380	819
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	33.6	N/A	N/A	N/A
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.1	153	330	712
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.3	313	674	1,452
7	Cactus Ave.	East of Heacock St.	Sensitive	78.8	170	365	787
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	76.9	184	397	855
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	73.7	113	243	523

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-39. Opening Year Cumulative with (Non-Peak) Project Contours

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	78.4	182	392	845
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	173	374	805
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.5	184	396	854
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	33.6	N/A	N/A	N/A
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.4	160	344	741
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.3	313	675	1,453
7	Cactus Ave.	East of Heacock St.	Sensitive	78.8	170	365	787
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.1	191	413	889
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	73.7	113	243	523

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-40. Opening Year Cumulative with (Peak) Project Contours

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	78.4	182	393	846
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	174	374	806
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.6	187	404	870
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	33.6	N/A	N/A	N/A
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.5	163	350	755
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.3	313	675	1,454
7	Cactus Ave.	East of Heacock St.	Sensitive	78.8	170	366	788
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.3	195	420	905
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	73.7	113	243	523

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-41. Horizon Year without Project Contours without Heacock Street Extension

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	78.7	192	413	889
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	173	374	805
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.6	187	402	867
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	33.6	N/A	N/A	N/A
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.5	163	350	755
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.7	330	711	1,532
7	Cactus Ave.	East of Heacock St.	Sensitive	79.1	179	386	831
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.3	195	420	904
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	74.0	119	257	553

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-42. Horizon Year with (Non-Peak) Project Contours without Heacock Street Extension

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	78.8	192	413	890
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	174	375	807
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.8	194	418	900
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	33.6	N/A	N/A	N/A
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.8	169	364	783
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.7	330	711	1,533
7	Cactus Ave.	East of Heacock St.	Sensitive	79.1	179	386	831
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.5	202	435	937
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	74.0	119	257	553

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-43. Horizon Year with (Peak) Project Contours without Heacock Street Extension

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	78.8	192	414	891
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	174	375	808
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.9	197	425	916
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	33.6	N/A	N/A	N/A
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.9	172	370	797
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.7	330	712	1,533
7	Cactus Ave.	East of Heacock St.	Sensitive	79.1	179	386	832
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.6	205	442	952
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	74.0	119	257	553

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-44. Horizon Year without Project Contours with Heacock Street Extension

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	78.7	192	413	889
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	173	374	805
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.6	187	402	867
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	75.2	111	240	516
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	77.8	146	314	677
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.7	330	711	1,532
7	Cactus Ave.	East of Heacock St.	Sensitive	79.1	179	386	831
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.3	195	420	904
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	74.1	121	260	560

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel.

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-45. Horizon Year with (Non-Peak) Project Contours with Heacock Street Extension

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	78.8	192	413	890
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	174	375	807
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.8	194	418	900
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	75.2	111	240	516
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.1	152	328	706
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.7	330	711	1,533
7	Cactus Ave.	East of Heacock St.	Sensitive	79.1	179	386	831
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.5	202	435	937
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	74.1	121	260	560

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel.

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Table 3.11-46. Horizon Year with (Peak) Project Contours with Heacock Street Extension

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^b	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Heacock St.	North of Gentian Ave.	Sensitive	78.8	192	414	891
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	174	375	808
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.9	197	425	916
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	75.2	111	240	516
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.2	155	334	721
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.7	330	712	1,533
7	Cactus Ave.	East of Heacock St.	Sensitive	79.1	179	386	832
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.6	205	442	952
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	74.1	121	260	560

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel.

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Existing with Project (Non-Peak) Traffic Noise Increase

An analysis of existing traffic noise levels plus traffic (non-peak) noise generated by the Proposed Project is provided for informational purposes and to fully analyze all the traffic scenarios identified in the Traffic Analysis (Appendix M-1). This condition is provided solely for informational purposes and would not occur because the Proposed Project would not be fully developed and occupied under existing conditions. Table 3.11-36 shows the Existing without Project noise levels. The Existing without Project exterior noise levels are expected to range from 33.6 to 79.9 dBA CNEL, without accounting for any noise attenuation features, such as noise barriers or topography. Table 3.11-36 shows that under Existing with (Non-Peak) Project conditions, traffic noise levels would also range from 33.6 to 79.9 dBA CNEL. Table 3.11-47 shows that the Proposed Project's off-site traffic noise levels would experience an increase ranging from 0.0 to 0.7 dB CNEL on the study area roadway segments.

Table 3.11-47. Existing Project (Non-Peak) Traffic Noise Increases

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^a			Threshold ^b	
				Without Project	With Project	Project Addition	Limit	Exceeded?
1	Heacock St.	North of Gentian Ave.	Sensitive	77.3	77.3	0.0	1.5	No
2	Heacock St.	South of Iris Ave.	Non-Sensitive	75.1	75.1	0.0	1.5	No
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	75.4	75.9	0.5	1.5	No
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	33.6	N/A	N/A	N/A	No
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	73.4	74.1	0.7	1.5	No
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	79.9	79.9	0.0	1.5	No
7	Cactus Ave.	East of Heacock St.	Sensitive	76.8	76.8	0.0	1.5	No
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	74.3	74.7	0.4	1.5	No
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	71.4	71.4	0.0	1.5	No

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Existing with Project (Peak) Traffic Noise Increase

An analysis of existing traffic noise levels plus traffic (peak) noise generated by the Proposed Project is provided for informational purposes and to fully analyze all the traffic scenarios identified in the Traffic Analysis (Appendix M-1). This condition is provided solely for informational purposes and would not occur, because the Proposed Project would not be fully developed and occupied under existing conditions. Table 3.11-35 shows the Existing without Project noise levels. The Existing without Project exterior noise levels are expected to range from 33.6 to 79.9 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 3.11-37 shows that under the Existing with (Peak) Project conditions, traffic noise levels would range from 33.6 to 79.9 dBA CNEL. Table 3.11-48 shows that the Proposed Project's off-site traffic noise level would experience a noise-level increase ranging from 0.0 to 1.0 dB CNEL on the study area roadway segments.

Table 3.11-48. Existing Project (Peak) Traffic Noise Increases

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^a			Threshold ^b	
				Without Project	With Project	Project Addition	Limit	Exceeded?
1	Heacock St.	North of Gentian Ave.	Sensitive	77.3	77.3	0.0	1.5	No
2	Heacock St.	South of Iris Ave.	Non-Sensitive	75.1	75.1	0.0	1.5	No
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	75.4	76.1	0.7	1.5	No
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	N/A	N/A	N/A	N/A	No
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	73.4	74.4	1.0	1.5	No
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	79.9	79.9	0.0	1.5	No
7	Cactus Ave.	East of Heacock St.	Sensitive	76.8	76.8	0.0	1.5	No
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	74.3	74.9	0.6	1.5	No
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	71.4	71.4	0.0	1.5	No

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Opening Year Cumulative with Project (Non-Peak) Traffic Noise Increase

As shown in Table 3.11-38, the Opening Year Cumulative without Project exterior noise levels are expected to range from 33.6 to 81.3 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. As shown in Table 3.11-39, under the Opening Year Cumulative with (Non-Peak) Project conditions, exterior noise levels would range from 33.6 to 81.3 dBA CNEL. As shown in Table 3.11-49, the Proposed Project's off-site traffic noise level increase would range from 0.0 to 0.3 dB CNEL, which would not exceed the significance thresholds of an increase of greater than or equal to 1.5 dB CNEL. Therefore, impacts would be **less than significant**.

Table 3.11-49. Opening Year Cumulative Project (Non-Peak) Traffic Noise Increases

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^a			Threshold ^b	
				Without Project	With Project	Project Addition	Limit	Exceeded?
1	Heacock St.	North of Gentian Ave.	Sensitive	78.4	78.4	0.0	1.5	No
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	78.1	0.0	1.5	No
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.2	78.5	0.3	1.5	No
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	N/A	N/A	N/A	N/A	No
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.1	78.4	0.3	1.5	No
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.3	81.3	0.0	1.5	No
7	Cactus Ave.	East of Heacock St.	Sensitive	78.8	78.8	0.0	1.5	No
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	76.9	77.1	0.2	1.5	No

Table 3.11-49. Opening Year Cumulative Project (Non-Peak) Traffic Noise Increases

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^a			Threshold ^b	
				Without Project	With Project	Project Addition	Limit	Exceeded?
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	73.7	73.7	0.0	1.5	No

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Opening Year Cumulative with Project (Peak) Traffic Noise Increase

As shown in Table 3.11-38, the Opening Year Cumulative without Project exterior noise levels are expected to range from 33.6 to 81.3 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. As shown in Table 3.11-40, the Opening Year Cumulative with (Peak) Project conditions would range from 33.6 to 81.3 dBA CNEL. As shown in Table 3.11-50, the Proposed Project's off-site traffic noise level increase would range from 0.0 to 0.4 dB CNEL, which would not exceed the significance thresholds of an increase of greater than or equal to 1.5 dB CNEL. Therefore, impacts would be **less than significant**.

Table 3.11-50. Opening Year Cumulative Project (Peak) Traffic Noise Increases

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^a			Threshold ^b	
				Without Project	With Project	Project Addition	Limit	Exceeded?
1	Heacock St.	North of Gentian Ave.	Sensitive	78.4	78.4	0.0	1.5	No
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	78.1	0.0	1.5	No
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.2	78.6	0.4	1.5	No
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	N/A	N/A	N/A	N/A	No
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.1	78.5	0.4	1.5	No
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.3	81.3	0.0	1.5	No
7	Cactus Ave.	East of Heacock St.	Sensitive	78.8	78.8	0.0	1.5	No
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	76.9	77.3	0.4	1.5	No
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	73.7	73.7	0.0	1.5	No

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Horizon Year with Project without Heacock Street Extension (Non-Peak) Traffic Noise Increase

As shown in Table 3.11-41, the Horizon Year without Project and without Heacock Street Extension exterior noise levels are expected to range from 33.6 to 81.7 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. As shown in Table 3.11-42, the Horizon Year with (Non-Peak) Project conditions without Heacock Street Extension would range from 33.6 to 81.7 dBA CNEL. As shown in Table 3.11-51, the Proposed Project's off-site traffic noise level increase would range from 0.0 to 0.3 dB CNEL, which would not exceed the significance thresholds of an increase of greater than or equal to 1.5 dB CNEL. Therefore, impacts would be **less than significant**.

Table 3.11-51. Horizon Year without Heacock Street Extension (Non-Peak) Project Traffic Noise Increases

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^a			Threshold ^b	
				Without Project	With Project	Project Addition	Limit	Exceeded?
1	Heacock St.	North of Gentian Ave.	Sensitive	78.7	78.8	0.1	1.5	No
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	78.1	0.0	1.5	No
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.6	78.8	0.2	1.5	No
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	N/A	N/A	N/A	N/A	No
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.5	78.8	0.3	1.5	No
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.7	81.7	0.0	1.5	No
7	Cactus Ave.	East of Heacock St.	Sensitive	79.1	79.1	0.0	1.5	No
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.3	77.5	0.2	1.5	No
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	74.0	74.0	0.0	1.5	No

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Horizon Year with Project without Heacock Street Extension (Peak) Traffic Noise Increase

As shown in Table 3.11-41, the Horizon Year without Project and without Heacock Street Extension exterior noise levels are expected to range from 33.6 to 81.7 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. As shown in Table 3.11-43, the Horizon Year with (Peak) Project conditions without Heacock Street Extension would range from 33.6 to 81.7 dBA CNEL. As shown in Table 3.11-52, the Proposed Project's off-site traffic noise level increase would range from 0.0 to 0.4 dB CNEL, which would not exceed the significance thresholds of an increase of greater than or equal to 1.5 dB CNEL. Therefore, impacts would be **less than significant**.

Table 3.11-52. Horizon Year without Heacock Street Extension (Peak) Project Traffic Noise Increases

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^a			Threshold ^b	
				Without Project	With Project	Project Addition	Limit	Exceeded?
1	Heacock St.	North of Gentian Ave.	Sensitive	78.7	78.8	0.1	1.5	No
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	78.1	0.0	1.5	No
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.6	78.9	0.3	1.5	No
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	N/A	N/A	N/A	N/A	No
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	78.5	78.9	0.4	1.5	No
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.7	81.7	0.0	1.5	No
7	Cactus Ave.	East of Heacock St.	Sensitive	79.1	79.1	0.0	1.5	No
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.3	77.6	0.3	1.5	No
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	74.0	74.0	0.0	1.5	No

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel; N/A = not applicable (Heacock Street Extension not yet built).

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Horizon Year without Project with Heacock Street Extension (Non-Peak) Traffic Noise Increase

As shown in Table 3.11-44, the Horizon Year without Project with Heacock Street Extension exterior noise levels are expected to range from 74.1 to 81.7 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. As shown in Table 3.11-45, the Horizon Year with (Non-Peak) Project conditions with Heacock Street Extension would range from 74.1 to 81.7 dBA CNEL. As shown in Table 3.11-53, the Proposed Project's off-site traffic noise level increase would range from 0.0 to 0.3 dB CNEL, which would not exceed the significance thresholds of an increase of greater than or equal to 1.5 dB CNEL. Therefore, impacts would be **less than significant**.

Table 3.11-53. Horizon Year with Heacock Street Extension (Non-Peak) Project Traffic Noise Increases

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^a			Threshold ^b	
				Without Project	With Project	Project Addition	Limit	Exceeded?
1	Heacock St.	North of Gentian Ave.	Sensitive	78.7	78.8	0.1	1.5	No
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	78.1	0.0	1.5	No
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.6	78.8	0.2	1.5	No
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	75.2	75.2	0.0	1.5	No
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	77.8	78.1	0.3	1.5	No
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.7	81.7	0.0	1.5	No

Table 3.11-53. Horizon Year with Heacock Street Extension (Non-Peak) Project Traffic Noise Increases

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^a			Threshold ^b	
				Without Project	With Project	Project Addition	Limit	Exceeded?
7	Cactus Ave.	East of Heacock St.	Sensitive	79.1	79.1	0.0	1.5	No
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.3	77.5	0.2	1.5	No
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	74.1	74.1	0.0	1.5	No

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel.

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Horizon Year with Project with Heacock Street Extension (Peak) Traffic Noise Increase

As shown in Table 3.11-44, Horizon Year without Project with Heacock Street Extension exterior noise levels are expected to range from 74.1 to 81.7 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. As shown in Table 3.11-46, the Horizon Year with (Peak) Project conditions with Heacock Street Extension would range from 74.1 to 81.7 dBA CNEL. As shown in Table 3.11-54, the Proposed Project's off-site traffic noise level increase would range from 0.0 to 0.4 dB CNEL, which would not exceed the significance thresholds of an increase of greater than or equal to 1.5 dB CNEL. Therefore, impacts would be **less than significant**.

Table 3.11-54. Horizon Year with Heacock Street Extension (Peak) Project Traffic Noise Increases

ID	Road	Segment	Receiving Land Use ^a	CNEL at Receiving Land Use (dBA) ^a			Threshold ^b	
				Without Project	With Project	Project Addition	Limit	Exceeded?
1	Heacock St.	North of Gentian Ave.	Sensitive	78.7	78.8	0.1	1.5	No
2	Heacock St.	South of Iris Ave.	Non-Sensitive	78.1	78.1	0.0	1.5	No
3	Heacock St.	South of Cardinal Ave.	Non-Sensitive	78.6	78.9	0.3	1.5	No
4	Heacock St.	South of Nandina Ave.	Non-Sensitive	75.2	75.2	0.0	1.5	No
5	Indian Ave.	South of Nandina Ave.	Non-Sensitive	77.8	78.2	0.4	1.5	No
6	Cactus Ave.	West of Heacock St.	Non-Sensitive	81.7	81.7	0.0	1.5	No
7	Cactus Ave.	East of Heacock St.	Sensitive	79.1	79.1	0.0	1.5	No
8	Harley Knox Blvd.	East of Patterson Ave.	Non-Sensitive	77.3	77.6	0.3	1.5	No
9	Harley Knox Blvd.	East of Indian Ave.	Non-Sensitive	74.1	74.1	0.0	1.5	No

Source: Appendix L-1.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel.

^a Based on a review of existing aerial imagery. Noise-sensitive uses limited to existing residential land uses.

^b The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving adjacent land use.

Threshold NOI-2: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less-Than-Significant Impact. Heavy truck and vehicular traffic on area roadways can generate groundborne noise and vibration levels; however, levels generated are rarely perceptible outside of the roadway right-of-way. The Proposed Project would not incorporate activities that would generate groundborne noise or vibration levels associated with the long-term operations of the Proposed Project. However, construction activity would have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used.

Typical Construction Vibration Impacts

As mentioned, construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. It is expected that groundborne vibration from Proposed Project construction activities would cause only intermittent, localized vibration. Groundborne vibration levels resulting from typical construction activities occurring within the project site were estimated by data published by FTA (FTA 2018). Ground vibration levels associated with various types of construction equipment are summarized in Table 3.11-24.

Table 3.11-55 presents the expected construction equipment vibration levels at the nearest receiver locations. At distances ranging from 2,730 feet to 3,166 feet from Proposed Project construction activities (at the project site boundary), construction vibration levels are estimated to range from 23.9 to 25.6 VdB and less than 0.001 inches per second (in/sec) peak particle velocity (PPV), which would remain below the FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criterion of 78 VdB for daytime residential uses and the Caltrans-recommended threshold of 0.3 in/sec PPV at all receiver locations. Further, vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period; instead, they would occur only during the times that heavy construction equipment is operating simultaneously adjacent to the project site. Therefore, Proposed Project-related construction vibration impacts would be **less than significant**.

Table 3.11-55. Typical Construction Equipment Vibration Levels

Receiver Location ^a	Distance to Construction Activity (Feet)	Receiver Vibration Levels, VdB (in/sec PPV) ^b					Threshold, VdB (in/sec PPV) ^c	Threshold Exceeded? ^d
		Small Bulldozer	Jack-hammer	Loaded Truck	Large Bulldozer	Highest Vibration Levels		
R1	3,140	0.0 (<0.001)	16.0 (<0.001)	23.0 (<0.001)	24.0 (<0.001)	24.0 (<0.001)	78 (0.3)	No
R2	3,166	0.0 (<0.001)	15.9 (<0.001)	22.9 (<0.001)	23.9 (<0.001)	23.9 (<0.001)	78 (0.3)	No
R3	2,777	0.0 (<0.001)	17.6 (<0.001)	24.6 (<0.001)	25.6 (<0.001)	25.6 (<0.001)	78 (0.3)	No
R4	2,730	0.0 (<0.001)	17.4 (<0.001)	24.4 (<0.001)	25.4 (<0.001)	25.4 (<0.001)	78 (0.3)	No

Notes: VdB = vibration decibel; in/sec PPV = inches per second peak particle velocity.

^a Receiver locations are shown in Figure 3.11-7, Construction Noise Source Locations.

^b Based on the Vibration Source Levels of Construction Equipment included in Table 3.11-24.

- c Federal Transit Administration Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria (VdB) and Caltrans recommended guideline threshold criteria (in/sec PPV).
- d Does the vibration level exceed the maximum acceptable vibration threshold?

Threshold NOI-3: For a project located within the vicinity of a private airstrip or 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?

Project Aircraft Operation Noise – Worker Exposure

Less-Than-Significant Impact with Mitigation Incorporated.

During construction, construction workers may be exposed to excessive noise levels due to the project site's proximity to March ARB/Inland Port and existing aircraft operations. Mitigation Measure (MM) NOI-1 (Construction Worker Hearing Protection) requires that prior to the issuance of any grading or building permit, the applicant provide evidence that the subject plans require all contractors to provide personal protective equipment to all employees in compliance with 8 CCR, Section 5096, along with educational materials. With implementation of **MM-NOI-1**, impacts to Proposed Project construction workers would be less than significant.

As discussed under Threshold NOI-1, based on the Riverside County ALUCP noise level contours and the March ARB 2018 AICUZ study, the proposed cargo building would be partially located within the 65 to 70 dBA CNEL noise level contours and would be considered normally acceptable for the proposed use. Outdoor activities on the project site are expected to be minimal and would include employees traveling from their vehicles to the buildings, as well as the loading and unloading of cargo from aircraft within the portions of the project site that are within the 60, 65, and 70 dBA CNEL noise contours of the March ARB/Inland Port Airport. The Project operator would be required to comply with 8 CCR, Section 5095 et seq. (Control of Noise Exposure), and, if necessary, to implement a hearing conservation program to ensure that employees are not exposed to excessive noise levels. Employers at surrounding facilities are similarly required to ensure that their employees are not exposed to excessive noise levels.

Construction of the Proposed Project would be required to meet CALGreen, Title 24, Part 11 standards. Specifically, the interior office areas and public-serving areas would need to meet the acoustical control provisions of CALGreen Section 5.507; the areas of the proposed building handling air cargo and aircraft-related activities would not be subject to these provisions, because these activities would not likely be affected by exterior noise. Standard construction practices for commercial buildings are typically capable of achieving an exterior-to-interior attenuation of approximately 20–25 dB. Since the proposed air cargo building would be located within the 65–70 dBA CNEL noise contour for March ARB, it would need to achieve greater than 25 dB exterior-to-interior noise reduction to comply with CALGreen Section 5.507. March JPA would review and approve the plans and specifications of the Proposed Project to ensure compliance with the provisions of CALGreen. No additional mitigation is required.

Project Aircraft Operation Noise – Residential Receptors Exposure

Significant and Unavoidable Impact. The Proposed Project is anticipated to average 17 flights (17 inbound/landing and 17 outbound/take-off operations) per day during non-peak operations, with up to 22 flights (22 inbound/landing and 22 outbound/take-off operations) potentially occurring over a 4-week

peak period during the holiday season. Flights would occur 6 days a week, with inbound flights generally occurring in the early morning hours and outbound flights occurring in the late evening and nighttime hours. Approximately 5% of Project-generated aircraft operations are anticipated to occur during the nighttime period, between 10:00 p.m. and 11:00 p.m.

An analysis of air cargo operations associated with the Proposed Project was performed using FAA's AEDT 3e aircraft emission modeling tool, which is the standard tool used to assess aviation noise. Because there is no proposed tenant at this time, the proposed flight operations scenarios reflect a fleet consisting of Boeing 767-300 aircraft, which is a typical plane utilized in air cargo operations. For comparison with the baseline, as depicted in Figure 3.11-3, aircraft noise modeling scenarios included non-peak Proposed Project air cargo operations (17 flights per day) and peak Proposed Project air cargo operations (22 flights per day). Because no other additional civilian aircraft operations are proposed at March ARB/Inland Port Airport, existing baseline plus the Proposed Project operations provides an accurate estimate of the Proposed Project's aircraft noise impacts. The noise contours including the Proposed Project's cargo operations are presented in Figure 3.11-11, Baseline + Project Non-Peak Aircraft Operational Noise Levels, and Figure 3.11-12, Baseline + Project Peak Aircraft Operational Noise Levels. Table 3.11-56 summarizes the Proposed Project's contribution to the existing aircraft noise environment.

Table 3.11-56. Aircraft Operation Noise-Level Summary

Receiver Location ^a	Baseline Aviation and Modeled Cargo Aircraft Noise Levels (dBA CNEL)					Project Contribution (dB CNEL) ^b		Relative Threshold ^c	Exceedance? (of Relative Threshold or 65 dBA CNEL due to Project Contribution)
	Baselined ^d	Non-peak Ops	Baseline + Non-peak Ops	Peak Ops	Baseline + Peak Ops	Non-peak Ops	Peak Ops		
R5	65.5	61	66.8	62	67.1	+1.3	+1.6	1.5	Yes
R6	64.7	59	65.8	61	66.3	+1.0	+1.5	3	Yes
R7	65.2	59	66.1	61	66.6	+0.9	+1.4	1.5	No
R8	64.6	58	65.4	60	65.9	+0.9	+1.3	3	Yes
R9	64.2	58	65.1	59	65.3	+0.9	+1.2	3	Yes
R10	64.2	58	65.1	59	65.4	+0.9	+1.1	3	Yes
R11	63.5	57	64.3	58	64.5	+0.9	+1.1	3	No
R12	63.5	56	64.2	58	64.6	+0.7	+1.1	3	No
R13	63.6	56	64.3	58	64.6	+0.7	+1.1	3	No
R14	63.1	56	63.9	57	64.0	+0.8	+1.0	3	No
R15	57.0	53	58.5	54	58.8	+1.4	+1.8	5	No

Source: Calculations performed by Dudek 2024.

Notes: dBA = A-weighted decibel; CNEL = community noise equivalent level; dB = decibel.

^a Aircraft noise receiver locations are shown in Figures 3.11-11 and 3.11-12.

^b The noise-level increase expected with the addition of Proposed Project air cargo flight operations.

^c Significance increase criteria as shown in Table 3.11-25.

^d Baseline aircraft noise as shown in Table 3.11-4.

The AEDT 3e aircraft noise model developed for the Proposed Project was evaluated to obtain noise exposure levels at the sensitive receptors nearest the March ARB/Inland Port Airport flight path, which are presented in Table 3.11-56. The following representative noise-sensitive receptors located in the vicinity of the southwest portion of the Markham Street and Brennan Avenue intersection are anticipated to be impacted:

- R5, already exposed to baseline aviation noise exceeding 65 CNEL, would experience a 1.6 dB increase (and thus more than the FICON relative threshold of 1.5 dB) during peak Project cargo aviation conditions.
- R6, R8, R9, and R10, while not currently exposed to baseline aviation noise exceeding 65 CNEL, would each experience an increase during non-peak or peak Project cargo aviation conditions sufficient to result in a predicted CNEL greater than 65 dBA.

Given the proximity of receptor location R7 to these above-listed receptors, it too may experience an exceedance with respect to Proposed Project contribution causing a resulting CNEL value to exceed 65 dBA, due to the margin of error for the baseline sound level at the position. As discussed above, Draft KC-46A EIS Location 9 (Catholic Church Sagrado Corazon de Jesus) is within the same block as receptor locations R5-R14 (see Table 3.11-4). Per Table 3.11-23, the baseline emulator model predicts a baseline aviation CNEL value that is 1.4 dB higher than what the Draft KC-46A EIS disclosed for Location 9. As shown in Table 3.11-56, the baseline sound level at R7 is 65.2 CNEL. If a similar difference were applied to R7, then its baseline aviation noise level would be less than 65 CNEL and the plus-Project scenarios would slightly exceed this impact significance threshold.

Cargo aircraft noise exposure levels generated by the Proposed Project's air cargo operations at all other noise-sensitive receiver locations were predicted to result in less-than-significant noise level increases, even after applying the 1.4 dB difference discussed above.

The residential neighborhood occupied by receptor locations R5-R14 and Draft KC-46A EIS Location 9 (Catholic Church Sagrado Corazon de Jesus) is divided by the predicted 65 CNEL contour line. Conservatively, the entire neighborhood (i.e., bounded by W. Markham Street to the north, N. Webster to the west, Brennan Avenue to the east, and the commercial area just north of the Ramona Expressway) would be considered potentially impacted for purposes of evaluating noise mitigation need. This neighborhood includes the following fifty-five residential addresses (receptor locations identified in bold):

- 4062, 4082, 4092, 4104, 4112, 4132, 4152, 4160, 4172, 4182, 4194, 4202, 4212, **4232 (R12)**, **4262 (R11)**, 4272, 4292, **4302 (R10)**, 4312 and **4342 (R7)** Brennan Avenue;
- **617 (R5)**, **637 (R6)**, **657 (R9)**, **677 (R13)**, 717, 737, 757 and 777 W. Markham Street;
- **616 (R14)** and 636 W. Perry Street; and
- 4063, 4083, 4093, 4103, 4113, 4153, 4163, 4173, 4183, 4193, 4203, 4213, 4253, 4263, 4273, 4293, 4303, 4313, 4323, 4333 and 4343 N. Webster Avenue.

Due to the nature of noise levels generated by aircraft landings and take-offs (i.e., acoustic energy affecting the roof, walls, windows, and doors), reducing the noise-level increase resulting from airborne operations is difficult. The primary mitigation measures suitable for addressing airborne aircraft noise can include modifications to the flight path, restrictions on hours of operation, limiting the number of flight operations, substituting aircraft type, or providing sound insulation treatment programs for those affected by aviation

noise. However, March JPA does not have the authority to modify flight paths at March ARB/Inland Port Airport or to mandate aircraft types. Additionally, the level of restriction on flight operations and incomplete involvement in sound insulation programs often result in limitations on achieving the necessary noise level reductions. **MM-NOI-2** (Future Tenant Aircraft Fleet) requires that, prior to issuance of a certificate of occupancy, a noise analysis be provided confirming that the proposed tenant's aircraft fleet mix would not exceed the noise levels disclosed in this EIR and that absent such documentation, additional environmental review is required. Noise impacts due to Proposed Project aircraft operations would be **significant and unavoidable** even with the application of feasible mitigation.

Threshold NOI-4: Would the project result in aircraft operations (i.e., aircraft landings and/or takeoffs) at the March Inland Port Airport between 10:00 p.m. and 6:59 a.m. that could expose people within the March Inland Port Airport's vicinity to a significant risk of sleep disturbance due to noise, as based on a single event noise exposure level analysis?

Less than Significant Impact. An analysis of aircraft noise levels associated with Proposed Project cargo operations was performed by BridgeNet and is included in Appendix L-2 to this EIR. The cargo aircraft noise-level analysis primarily included the development of noise contours and receiver locations representing noise-sensitive land uses in FAA's AEDT 3e aircraft emission modeling tool. Aircraft noise modeling for potential sleep disturbance analysis reflect the Proposed Project's flight operations and a fleet consisting of Boeing 767-300 aircraft, which is a typical plane utilized in air cargo operations.

In 2008, ANSI and ASA released a voluntary methodology to predict sleep disturbance in terms of the probability of awakening. The 2008 ANSI standard is now superseded by the aforementioned ASA TR S.12.9-2018/Part 6 method to predict sleep disturbance associated with noise levels in terms of the indoor A-weighted sound exposure level (ASA 2018). The methodology includes equations and recommendations for disturbances where people are familiar with the noise environment, and a separate calculation formula for those new to the area and those who are not accustomed to the aircraft noise events. According to Appendix L-2, the latter calculation was newly introduced by ASA TR S.12.9-2018/Part 6, since prior sleep research had been focused on residents that were exposed to a noise for longer than 1 year, and that it relies on the FICON recommendation of using a functional relation "that would better correlate nighttime sounds for residents that are new to an area." The methodology assumes that the individuals have no sleep disorders and normal hearing, and only applies to individuals 18 years of age and older. According to the ANSI guidance, "This equation was derived from behavioral awakenings associated with noise events in 'steady-state' situations where the noise has been present in both level and in frequency of occurrence for at least a year" (ASA 2018).

The nighttime awakenings analysis was prepared by applying the voluntary ANSI Technical Report ASA TR S.12.9-2018/Part 6 (ASA 2018). Existing civilian aircraft operations are primarily conducted during the daytime period, with only occasional and intermittent nighttime operations. The Draft KC-46A EIS disclosed 40 civilian nighttime flight operations but did not break down types of civilian aircraft. According to 2022 March Inland Port Airport Authority flight data, there were 53 civilian nighttime flight operations: 18 single/twin engine, 21 helicopter, 2 commercial, and 12 jet (MIPAA 2023). Single/twin-engine and helicopter operations have significantly lower noise impacts; commercial and jet operations would be equivalent to the Proposed Project's operations. Of the 14 commercial/jet nighttime flight operations in 2022, only 4 occurred during the 10:00–11:00 p.m. time frame proposed for the Proposed Project's operations. The Draft KC-46A EIS disclosed 288 annual military flight operations but did not provide any

further breakdown timewise to determine the existing military flight operations during the 10:00-11:00 p.m. time frame. Assuming there is currently some amount of military flight operations during the 10:00-11:00 p.m. hour, existing residents would have acclimated to that aircraft noise and would not experience as large an increase in nighttime awakenings from the addition of the Proposed Project operations. Therefore, it is conservative to utilize no nighttime flight operations during the 10:00-11:00 p.m. hour as the existing baseline, because the analysis does not account for existing residents' current levels of aircraft noise acclimation, thereby resulting in higher percentages of potential sleep disturbances. From an environmental justice standpoint, this approach ensures that existing residents currently affected by nighttime aircraft noise are treated similarly to residents with no existing nighttime aircraft noise.

FAA's AEDT 3e was used to calculate the A-weighted sound exposure level for each of the noise-sensitive receptors. The exterior nighttime aircraft A-weighted sound exposure levels calculated using AEDT were converted to interior A-weighted sound exposure level values using an exterior-to-interior noise-level reduction value of 15 dB, assumed for buildings with windows that may potentially be open. Typical noise-level reduction values for buildings with windows closed ranges from 20 dB to 25 dB. Although there are periods throughout the year when it is likely that windows will be closed (i.e., periods of cold temperatures in the winter and hot temperatures in the summer), this analysis employs a conservative approach in assuming a windows-open scenario.

The ANSI standard methodology was applied for each unique event that occurred at each receptor. The resulting percentage discloses the likelihood of potential awakening during the night for each unique receptor. The probability of potential nighttime awakenings from Proposed Project operations are shown in Table 3.11-57. Because the Proposed Project would involve new nighttime flights, all affected residents are considered "new" rather than habituated. After a year of Proposed Project operations, existing residents would be habituated, with lower numbers of potential awakenings. As disclosed in Table 2-1, Proposed Aircraft Operations, only Proposed Project departures would occur during the 10:00 to 11:00 p.m. hour. Table 3.11-57 presents the percentages for departures from Runways 32 and 14.⁶

Table 3.11-57. Probability of Potential Nighttime Awakenings under the Proposed Project for Departures from Runways 32 and 14

RN	Runway 14 Departure		Runway 32 Departure		Threshold	Exceeded?
	Project Opening/New Residents	Habituated Residents	Project Opening/New Residents	Habituated Residents	10%	No
R5	8.2%	2.9%	3.4%	1.3%	10%	No
R6	8.2%	2.9%	3.5%	1.3%	10%	No
R7	8.2%	2.9%	3.4%	1.3%	10%	No
R8	8.2%	2.9%	3.3%	1.3%	10%	No
R9	8.2%	2.9%	3.5%	1.4%	10%	No
R10	8.1%	2.9%	3.3%	1.3%	10%	No
R11	8.1%	2.9%	3.3%	1.3%	10%	No
R13	8.2%	2.9%	3.5%	1.4%	10%	No
R14	8.1%	2.8%	3.2%	1.3%	10%	No

⁶ For disclosure purposes, Appendix L-2 also provides the analysis for arrivals on Runways 14 and 32.

Table 3.11-57. Probability of Potential Nighttime Awakenings under the Proposed Project for Departures from Runways 32 and 14

RN	Runway 14 Departure		Runway 32 Departure		Threshold	Exceeded?
	Project Opening/New Residents	Habituated Residents	Project Opening/New Residents	Habituated Residents	10%	No
R16	2.5%	1.1%	7.7%	2.7%	10%	No
R17	2.5%	1.1%	7.7%	2.7%	10%	No
R18	2.4%	1.1%	7.7%	2.7%	10%	No
R19	2.4%	1.1%	7.6%	2.6%	10%	No
R20	2.4%	1.1%	7.6%	2.6%	10%	No

Source: Appendix L-2.

Note: RN = Receiver Number.

The probability of potential nighttime awakenings at least once over the course of the night would be the greatest closest to the airport. This is consistent with the fact that aircraft noise is louder the closer an aircraft is to the ground. As shown in Table 3.11-57, the potential for nighttime awakening due to the Proposed Project's nighttime cargo aircraft operations ranges from 2.4% to 8.2% at Project opening for the noise-sensitive receptors. This awakenings analysis assumed that residents would have their windows open at night. A windows-closed scenario would reduce the percentage for potential awakenings. Therefore, the Proposed Project's operations would have a **less-than-significant** impact for potential awakenings during the 10:00 to 11:00 p.m. hour.

3.11.6 Mitigation Measures

MM-NOI-1 Construction Worker Hearing Protection. Prior to issuance of any grading permit and building permit, the applicant shall provide evidence that the subject plans contain the following requirements and restrictions:

- Contractors shall provide personal protective equipment to all employees in compliance with 8 CCR, Section 5096 [Exposure Limits for Noise].
- Contractors shall provide all employees with a copy of "Protecting Yourself from Noise in Construction – Pocket Guide" OSHA Publication 3498 (2011), or similar educational materials.

MM-NOI-2 Future Tenant Aircraft Fleet. Prior to issuance of a certificate of occupancy, the applicant shall provide documentation to March Joint Powers Authority confirming that expected noise emissions from the tenant's aircraft fleet mix do not exceed the noise impacts identified and disclosed in this Environmental Impact Report. Such documentation shall confirm the residential areas that would experience a significant noise increase due to aircraft operations is equal to or less than that disclosed under Threshold NOI-3. Absent such documentation, additional environmental review shall be required.

3.11.7 Level of Significance after Mitigation

As discussed in Section 3.11.5, Threshold NOI-1, the Proposed Project would have the potential to expose construction workers at the project site to significant aircraft noise levels above the 65 dBA CNEL threshold. With implementation of **MM-NOI-1** (Construction Worker Hearing Protection), contractors will be required to provide employees with personal protective equipment as required by 8 CCR, Section 5096, along with educational materials regarding hearing protection and this impact would be reduced to **less than significant with mitigation incorporated**.

As further discussed under Threshold NOI-3, the Proposed Project would have the potential to expose area residents to significant increases in aircraft noise levels. **MM-NOI-2** (Future Tenant Aircraft Fleet) requires that prior to issuance of a certificate of occupancy, a noise analysis shall be provided confirming that the proposed tenant's aircraft fleet mix would not exceed the noise levels disclosed in this EIR; absent this documentation, additional environmental review will be required. Given that incomplete involvement in sound insulation programs often results in limitations on achieving the necessary noise level reductions, additional mitigation is not feasible to address noise impacts to area residents due to Proposed Project aircraft operations, which would be **significant and unavoidable** even with the application of feasible mitigation.

Under Threshold NOI-4, the Proposed Project's operations would have a **less than significant** impact for potential awakenings during the 10-11pm hour.

3.11.8 Cumulative Effects

Future development within the jurisdiction of March JPA, the City of Moreno Valley, the City of Perris, and Riverside County, including the Proposed Project, would potentially contribute to and affect the future (cumulative) ambient noise environment. The geographic context to evaluate cumulative noise impacts would include future buildout of the surrounding City and County area, extending out from the project site between 3 to 5 miles. While it is difficult to project exactly how the ambient noise conditions within the area would change, it is known that traffic noise levels would increase due to the additional traffic generated by the Proposed Project and other development in the region. In the cumulative scenario, ongoing development in the region would be expected to increase the ambient noise environment in the area as a result of increased traffic volumes, increased residential population and commercial/industrial activities. The primary factors for the cumulative noise impact analysis are the consideration of future traffic volumes and other aviation operations at March ARB/Inland Port Airport. Non-transportation noise sources (e.g., Proposed Project operation) and construction activities would result in less potential to contribute to the cumulative noise environment.

Non-transportation noise sources (e.g., Proposed Project on-site operations) are typically project specific and highly localized (i.e., these do not generally affect the community noise level at distances beyond several hundred feet). As other development occurs in the area, noise from different types of uses (e.g., traffic, aircraft, fixed noise sources) would continue to combine, albeit on a localized basis, which potentially may increase overall background noise conditions in the immediate area of the project site. However, based on observations noted during the field survey, activity associated with other operations at March ARB/Inland Port Airport, the nearby regional transportation routes, and the land use zonings surrounding the project site, the Proposed Project's non-transportation contribution to the cumulative noise environment would be anticipated to be minimal. As a result, such sources would not significantly contribute to cumulative noise impacts at distant locations and are not evaluated on a cumulative level.

Construction noise impacts are highly localized (i.e., do not generally affect the community noise level at distances beyond 1,500 feet). However, with simultaneous construction activities occurring at two or more sites close to one another, the construction noise levels experienced at sensitive receptors in proximity to the activities would be greater than for construction of each individual project. However, given the scale of the project site and the distribution of equipment across the site at any given time during Proposed Project construction, the average construction noise levels at nearby residences would not be anticipated to be materially different for Proposed Project construction efforts combined with other local projects that could overlap the Proposed Project construction schedule, as compared to the Proposed Project by itself.

The Proposed Project would generate roadway traffic, which would be added to roadway volumes generated by other projects on the assembled cumulative project list. The Traffic Analysis for the Proposed Project (Appendix M-1) evaluated the resulting roadway volumes from the Proposed Project, in combination with the traffic generated from the cumulative project list. The change in community noise level for existing residences along roadways to which the Proposed Project would contribute vehicle trips was compared to the noise level from cumulative projects. That cumulative traffic noise analysis concluded that the Proposed Project would not contribute substantially to any cumulative traffic noise impact (see Section 3.12, Transportation).

At this time, apart from the Proposed Project, there are no other planned or proposed air cargo projects that would have the potential to increase aviation operations and the associated aircraft noise levels. If DAF approves the replacement of the KC-135 aircraft with the KC-46A aircraft at March ARB, the Draft KC-46A EIS disclosed military flight operations will be reduced by approximately 2,160 flight operations, which will lessen noise impacts (DAF 2024). Civilian flights currently make up approximately 18% of flight operations at March ARB/Inland Port Airport. If the Proposed Project is implemented, its additional 10,608 flight operations would represent approximately 30% of the flight operations at March ARB/Inland Port Airport. Given that the Proposed Project would potentially contribute a large majority of the acoustic energy associated with aviation activity at March ARB/Inland Port Airport, the Proposed Project would have the potential to result in a cumulatively considerable new increase of aviation noise levels that would be **significant and unavoidable** even with the implementation of mitigation measures. With regard to sleep disturbance, if DAF approves the replacement of the KC-135 aircraft with the KC-46A aircraft at March ARB, the Draft KC-46A EIS disclosed nighttime flight operations would be reduced by 133 operations, which would also decrease the sleep disturbances from military flight operations. Because the Proposed Project's potential sleep disturbance impacts would be less-than-significant, the resulting combination would not be cumulatively considerable and therefore would constitute a **less-than-significant** cumulative impact.

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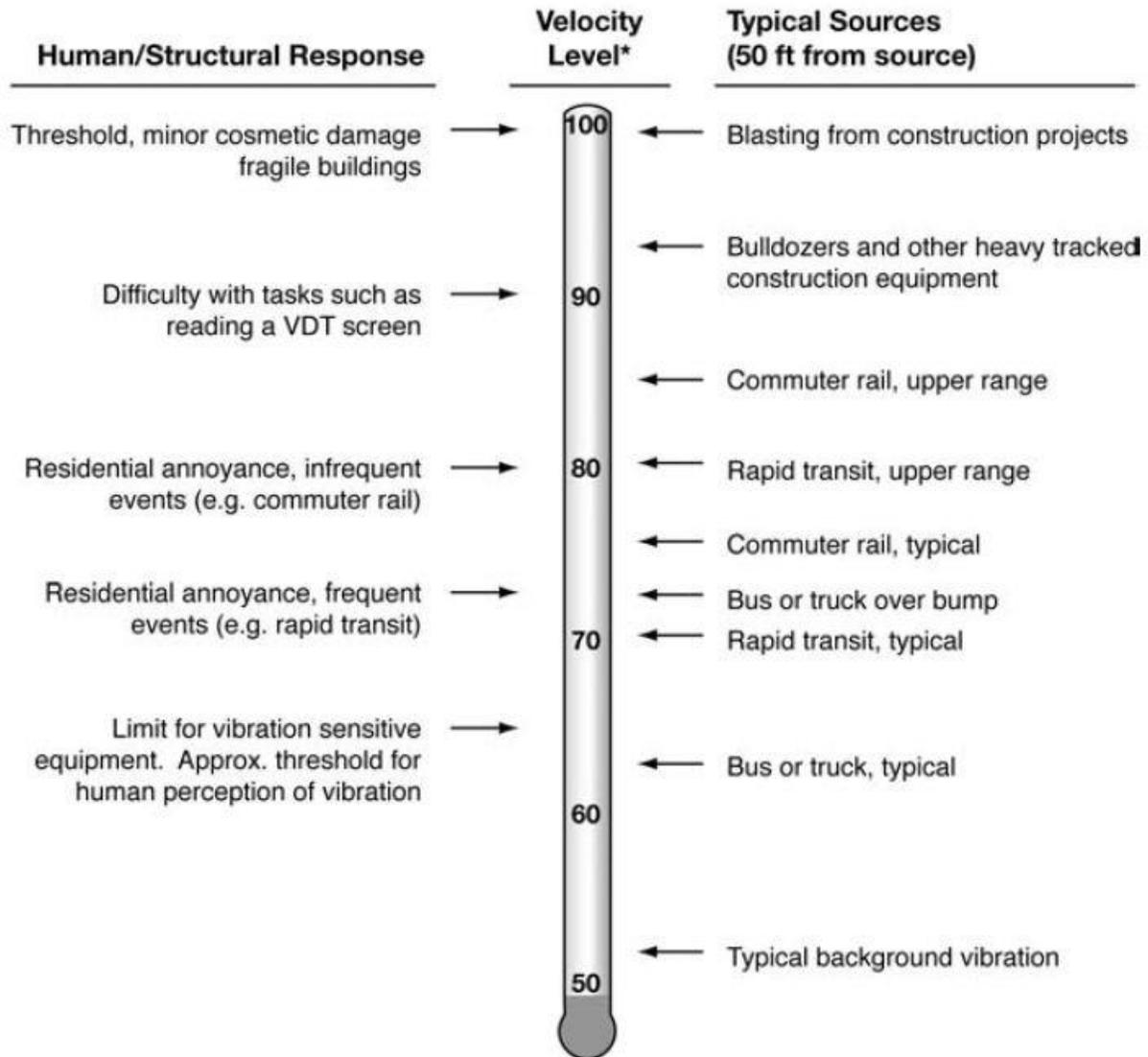
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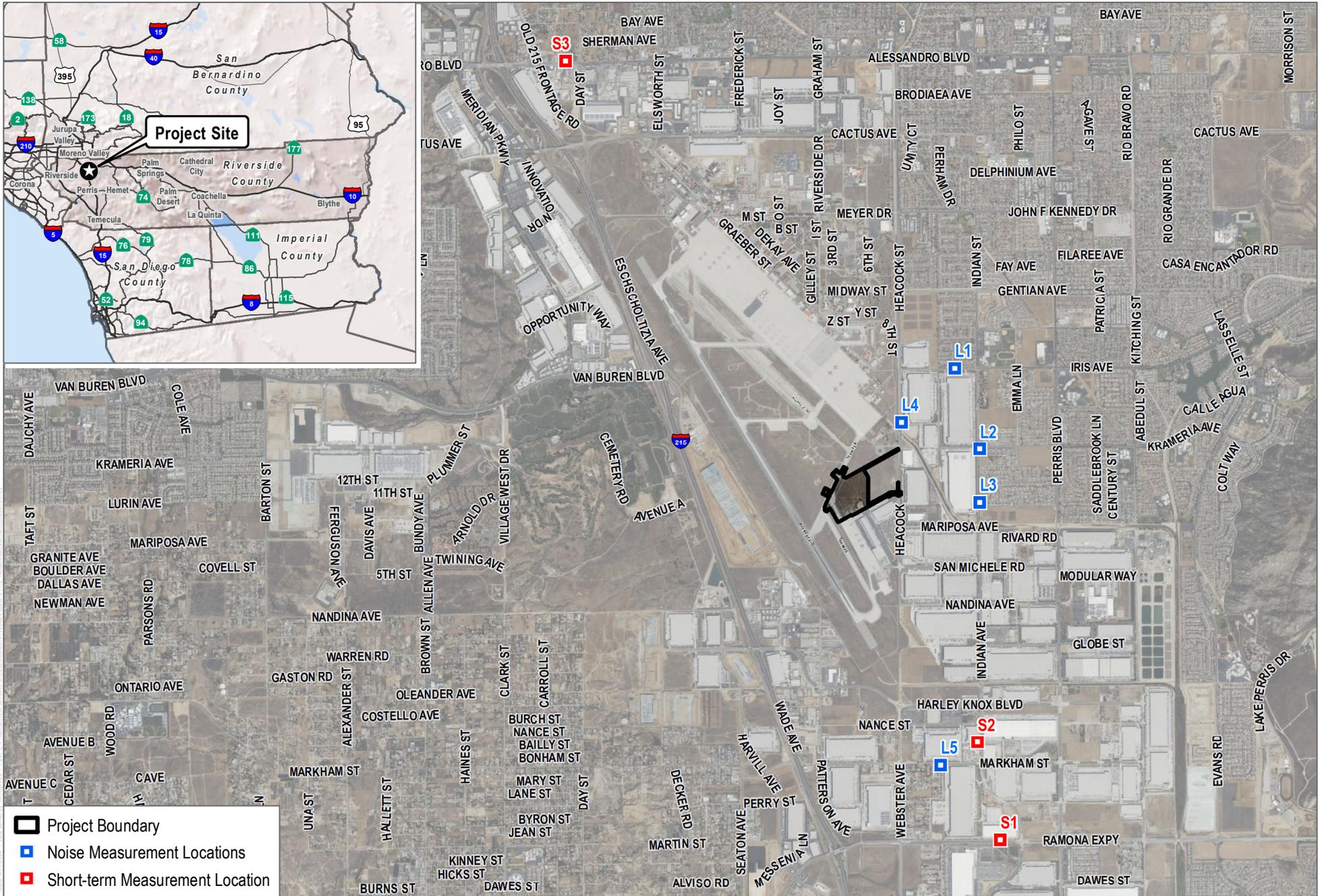
Figure 3.11-1 Typical Levels of Groundborne Vibration and Human/Structural Response



* RMS Vibration Velocity Level in VdB relative to 10^{-6} inches/second

Source: FTA 2018.

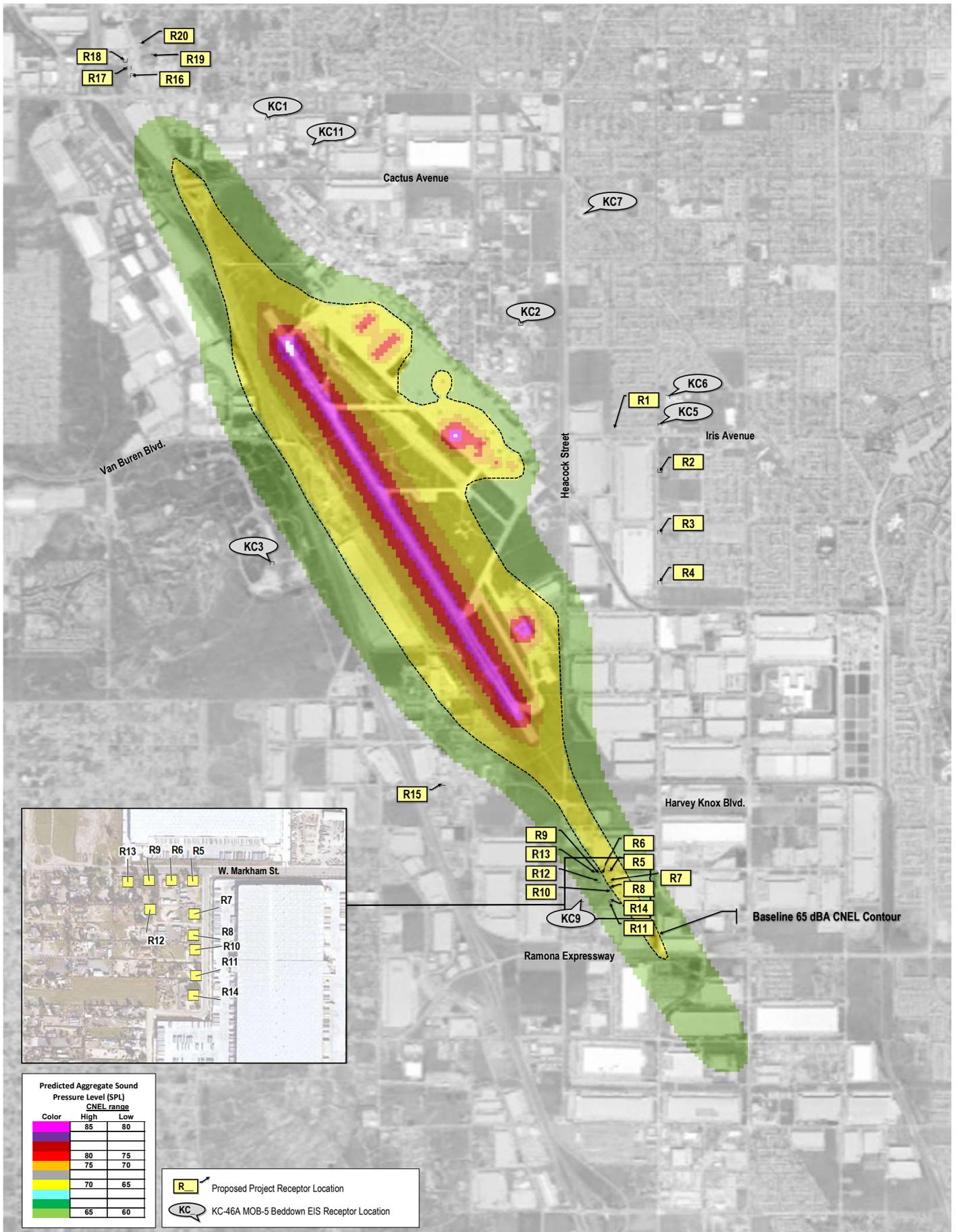
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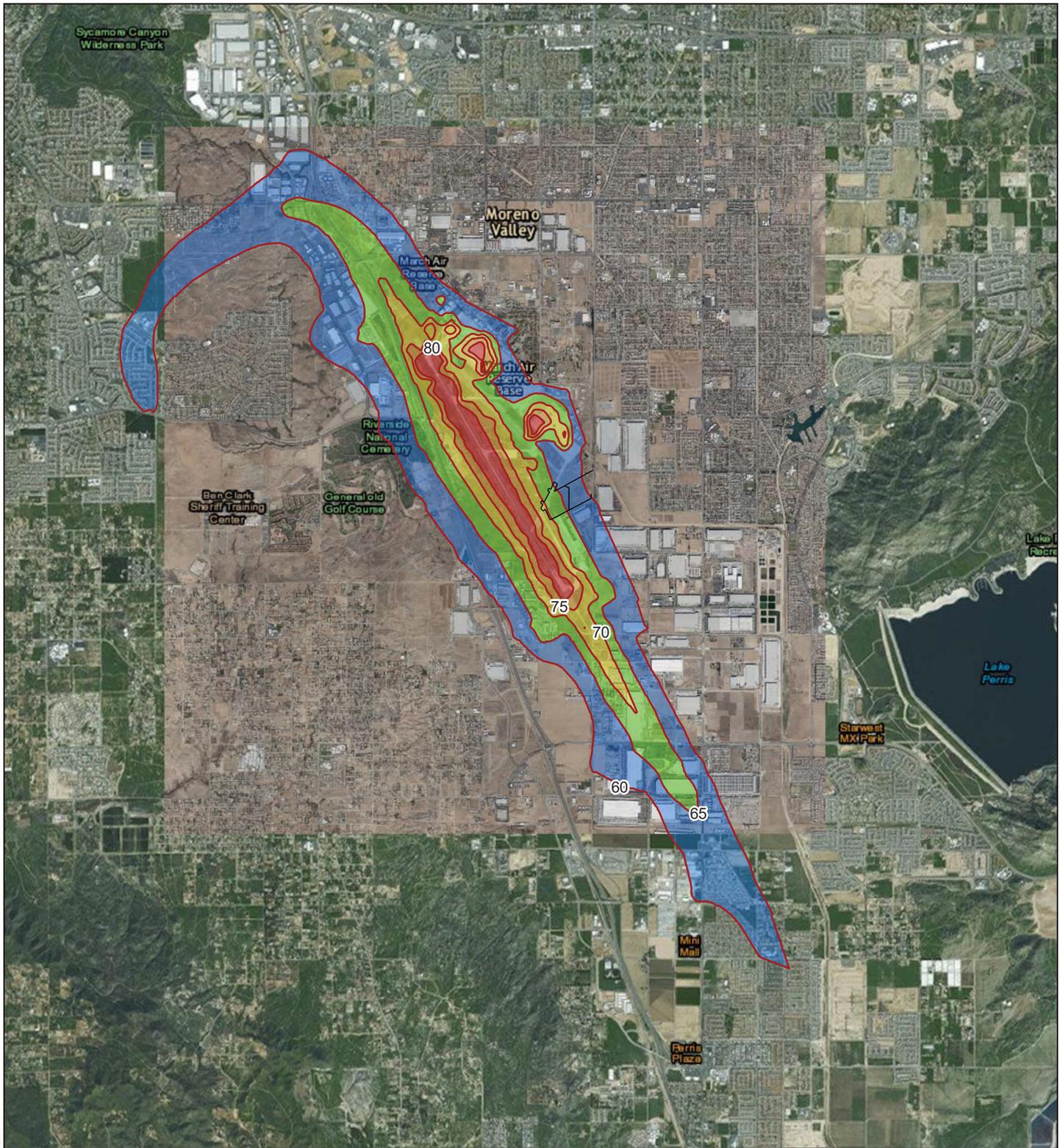
SOURCE: Urban Crossroads; Riverside County; Bing Maps

FIGURE 3.11-2
Project Location and Noise Measurement Locations

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Legend

— March ARB 2018 Noise Contours — Proposed Project Location

Noise Contour Levels (CNEL)

60dB 65dB 70dB 75dB 80dB



1 inch = 1.29 miles

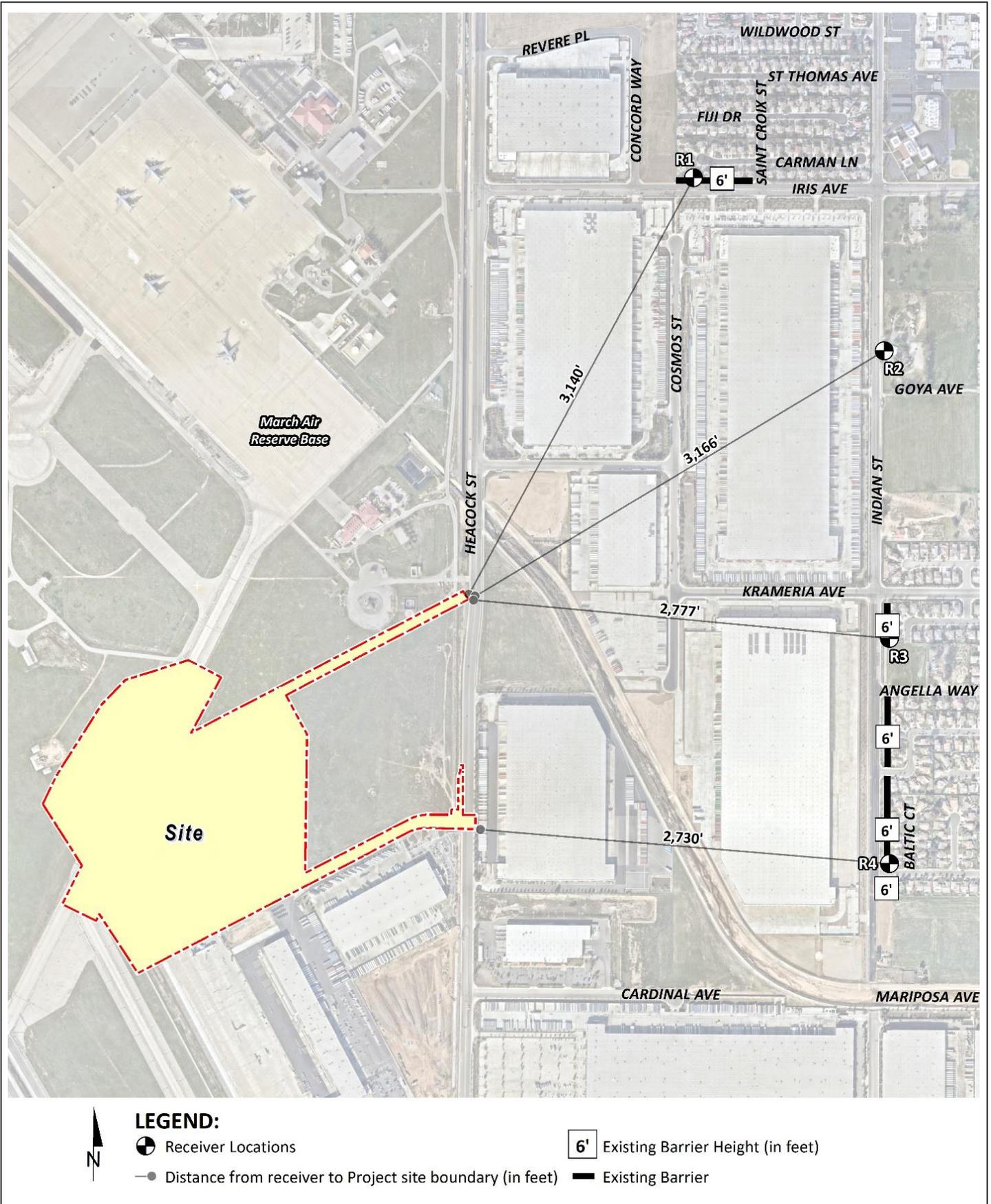
SOURCE: March ARB 2018

FIGURE 3.11-4

March ARB 2018 AICUZ Noise Contours

Meridian D-1 Gateway Aviation Center Project

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SOURCE: Meridian D-1 Gateway Aviation Center Noise Impact Analysis, 2023

FIGURE 3.11-5

Receiver Locations - Ground-Level Noise

Meridian Park D-1 Gateway Aviation Project

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SOURCE: Dudek 2024

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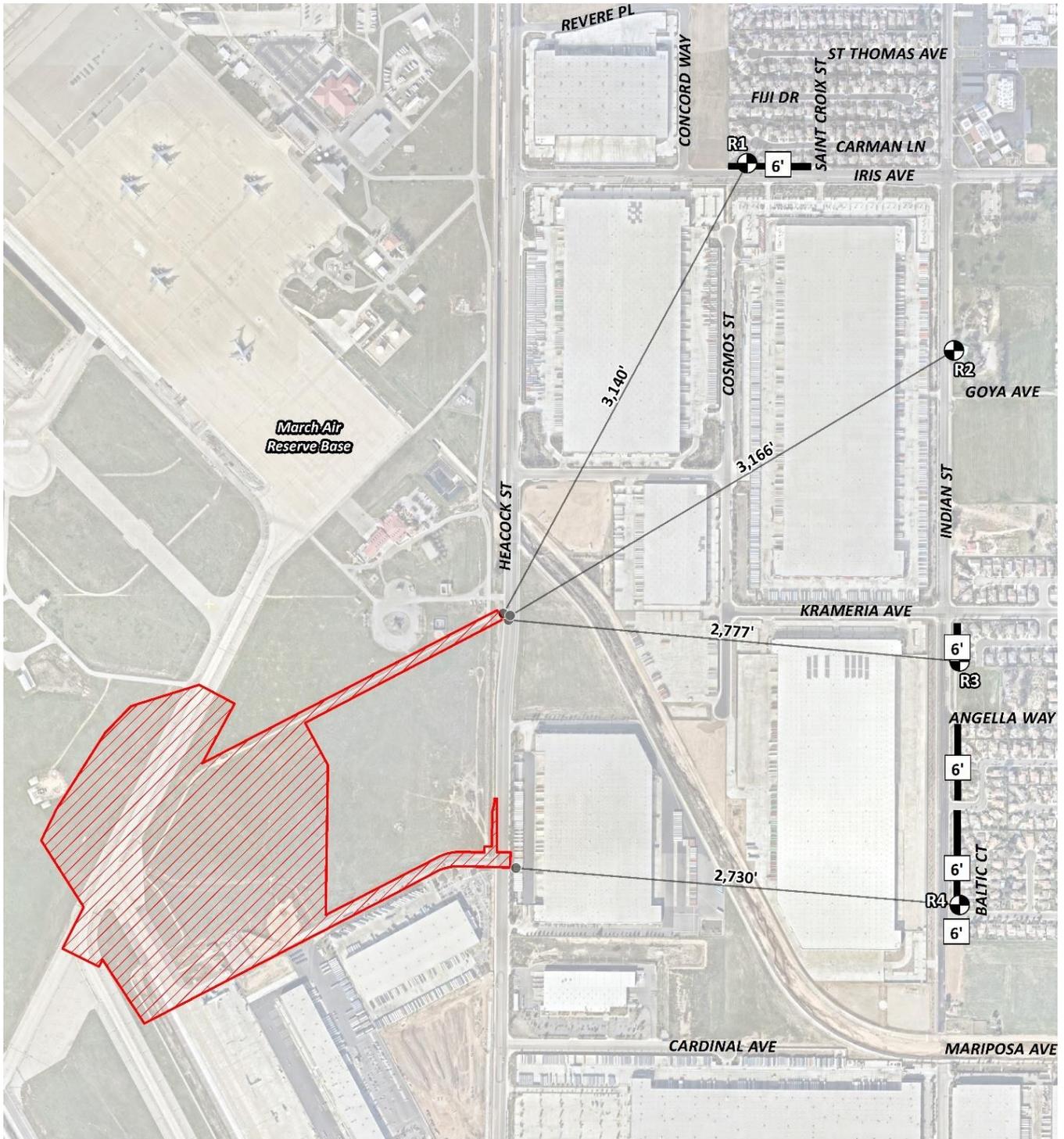


0 1187 2374 Feet

FIGURE 3.11-6

Receiver Locations – Aircraft Operational Noise
Meridian Park D-1 Gateway Aviation Project

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LEGEND:

Limits of Construction

Receiver Locations

Distance from receiver to Project site boundary (in feet)

Existing Barrier Height (in feet)

Existing Barrier



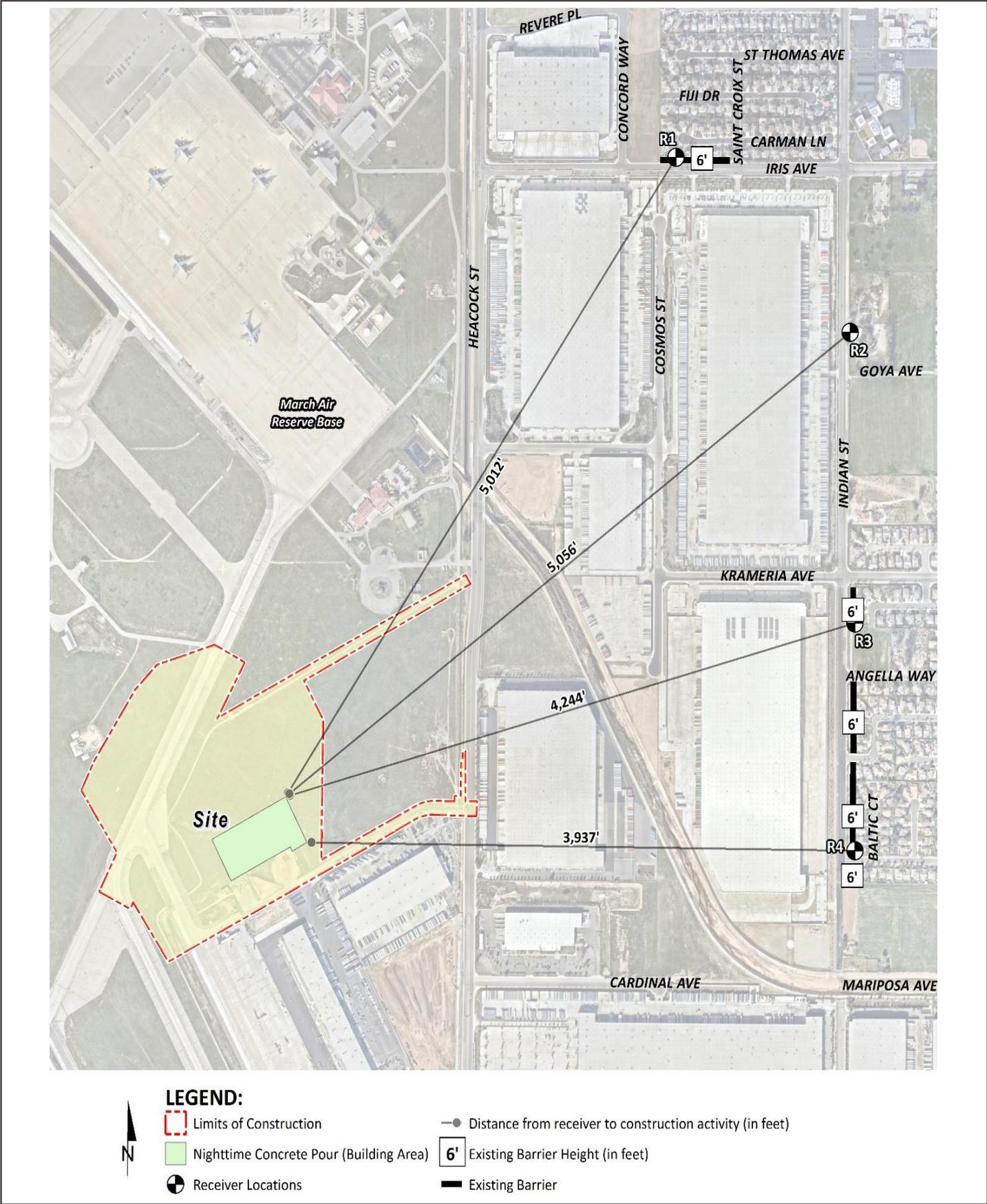
SOURCE: Urban Crossroads 2023

FIGURE 3.11-7

Construction Noise Source Locations

Meridian D-1 Gateway Aviation Center Project

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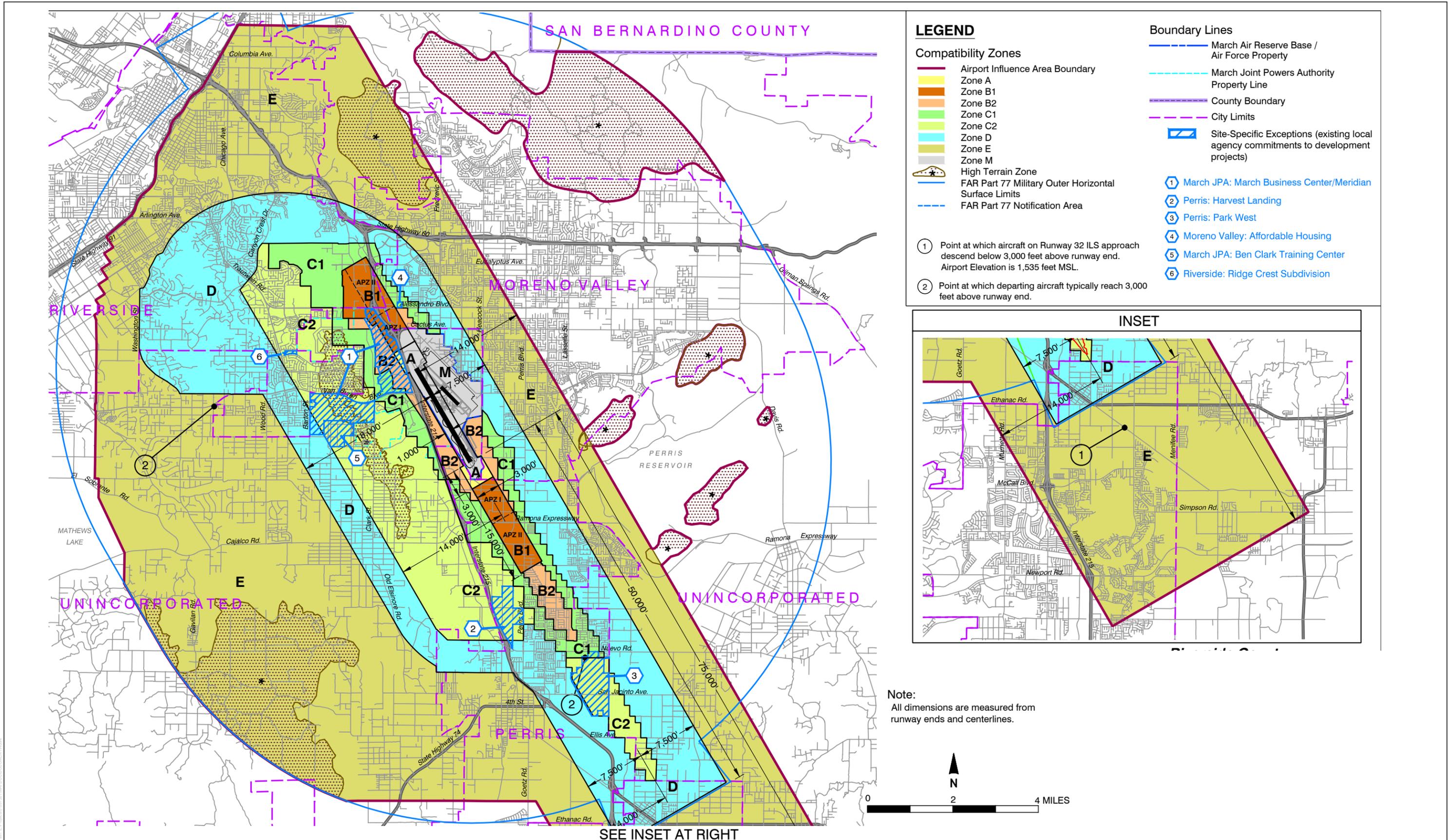
SOURCE: Urban Crossroads 2023

FIGURE 3.11-8

Nighttime Concrete Pour Noise Source and Receiver Locations

Meridian D-1 Gateway Aviation Center Project

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LEGEND

Compatibility Zones

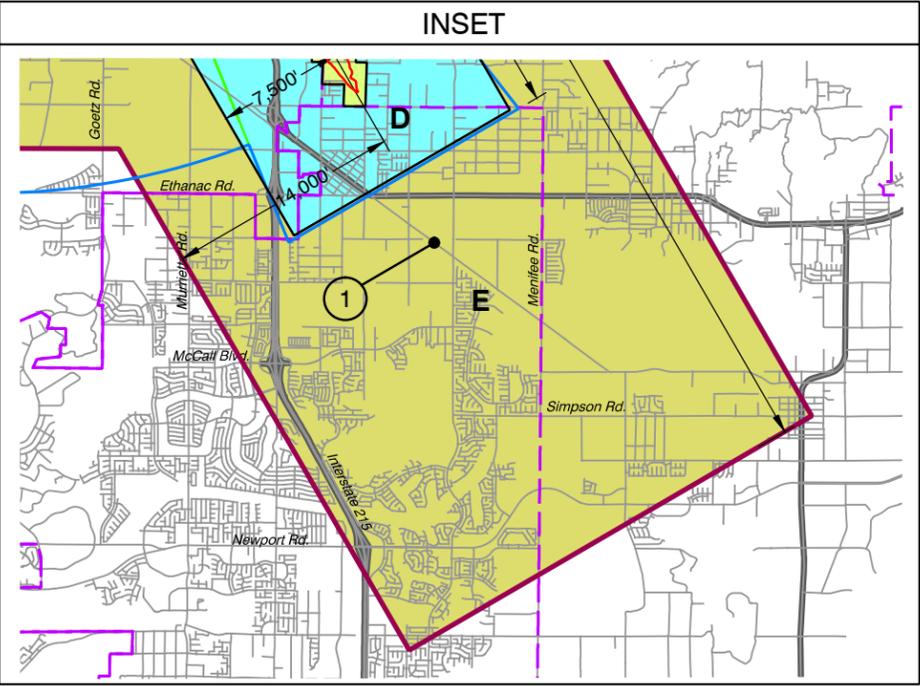
- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Zone E
- Zone M
- High Terrain Zone
- FAR Part 77 Military Outer Horizontal Surface Limits
- FAR Part 77 Notification Area

Boundary Lines

- March Air Reserve Base / Air Force Property
- March Joint Powers Authority Property Line
- County Boundary
- City Limits
- Site-Specific Exceptions (existing local agency commitments to development projects)

- ① Point at which aircraft on Runway 32 ILS approach descend below 3,000 feet above runway end. Airport Elevation is 1,535 feet MSL.
- ② Point at which departing aircraft typically reach 3,000 feet above runway end.

- ① March JPA: March Business Center/Meridian
- ② Perris: Harvest Landing
- ③ Perris: Park West
- ④ Moreno Valley: Affordable Housing
- ⑤ March JPA: Ben Clark Training Center
- ⑥ Riverside: Ridge Crest Subdivision



Note:
All dimensions are measured from runway ends and centerlines.

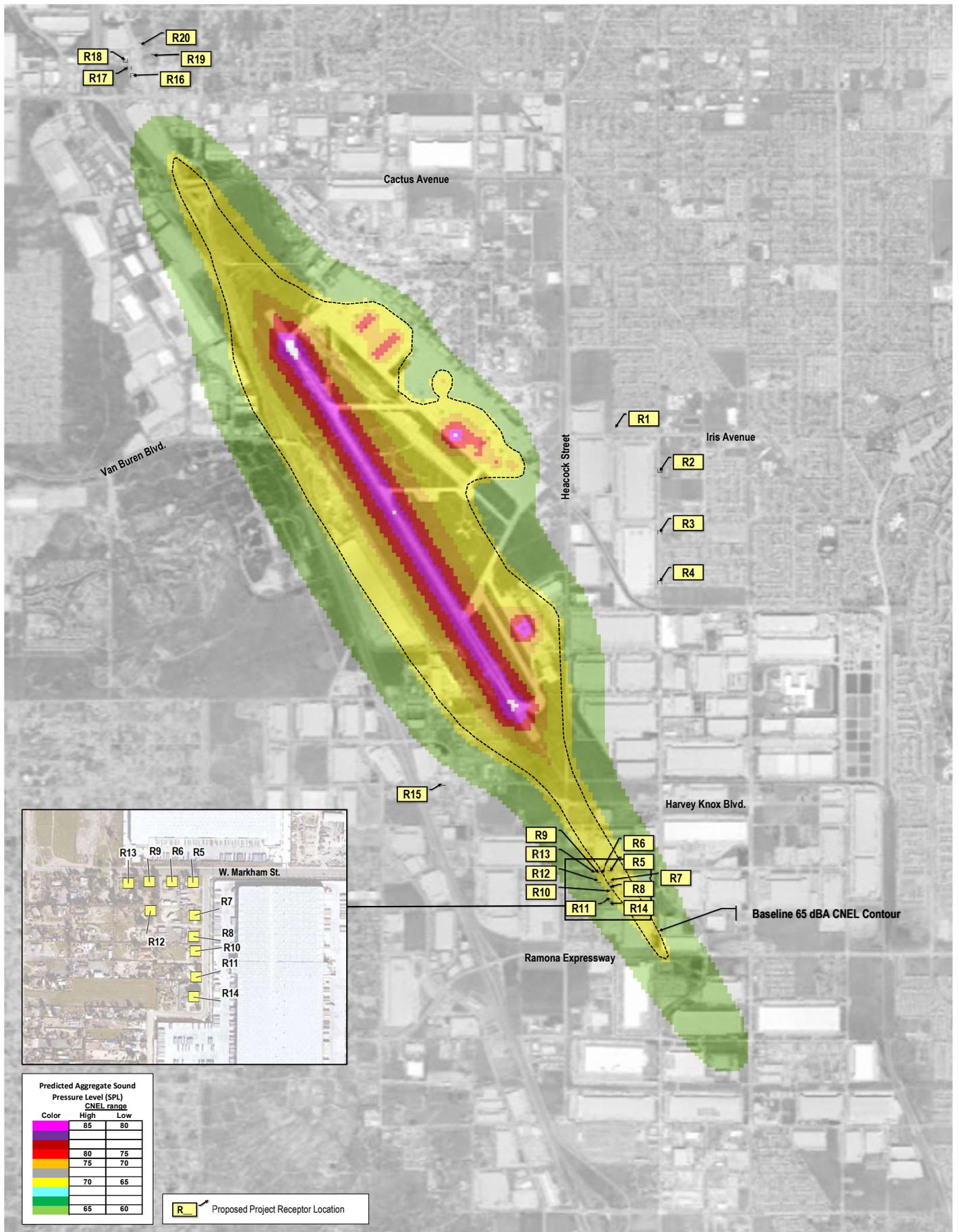


SOURCE: Mead & Hunt, Inc., June 2013

FIGURE 3.11-9

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SOURCE: Dudek 2024; USAF 2023

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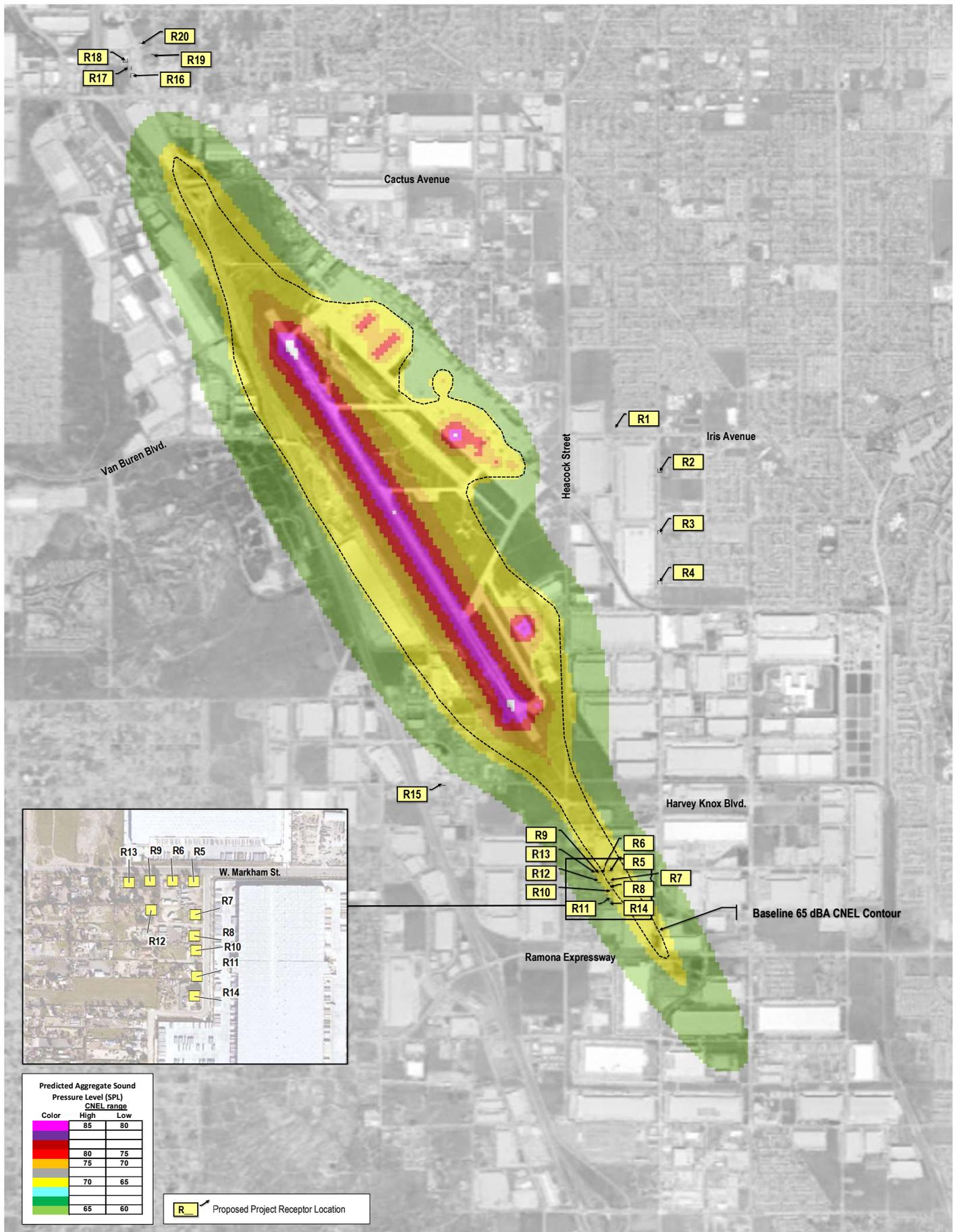
0 1187 2374 Feet

FIGURE 3.11-11

Baseline + Project Non-Peak Aircraft Operational Noise Levels

Meridian Park D-1 Gateway Aviation Project

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SOURCE: Dudek 2024; USAF 2023

DUDEK



0 1187 2374 Feet

FIGURE 3.11-12

Baseline + Project Peak Aircraft Operational Noise Levels

Meridian Park D-1 Gateway Aviation Project

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3.12 Transportation

This section describes the existing transportation setting of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, evaluates potential impacts related to implementation of the Proposed Project, and identifies a Project Design Feature (PDF) to be incorporated and a mitigation measure to be implemented to reduce potential impacts of the Proposed Project. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Gateway Aviation Traffic Analysis (TA) prepared by Urban Crossroads on July 19, 2023 (Appendix M-1)
- Gateway Aviation D-1 Vehicle Miles Traveled (VMT) Analyses prepared by Urban Crossroads on June 7, 2022 (Appendix M-2, including Appendix M-2A, VMT Analysis for the Proposed Project, and Appendix M-2B, VMT Alternatives Analysis)

The transportation analysis, including the VMT Analyses and TA, was prepared per requirements established by the March Joint Powers Authority (JPA) California Environmental Quality Act (CEQA) Guidelines (March JPA 2022), the March JPA Final Traffic Impact Study Preparation Guide (March JPA 2020), the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018), the Western Riverside Council of Governments (WRCOG) Senate Bill (SB) 743 Implementation Pathway Document Package and Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (WRCOG 2019, 2020), and the California Department of Transportation (Caltrans) Traffic Safety Bulletin 20-02-R1: Interim Local Development Intergovernmental Review Safety Review Practitioners Guidance (Caltrans Safety Review Guidance; Caltrans 2020a). Additionally, consultation with March JPA and City of Moreno Valley staff occurred during the scoping process. Other sources consulted are listed in Section 3.12.10, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March JPA. The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (Non-Peak). During the Peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

Vehicular access to the project site would occur at a new signalized entrance onto Heacock Street, expanding the existing access road to the facilities south of the project site. At the intersection, the access road would be expanded to 60 feet in width, with five lanes. Access to the project site would be provided via dual lanes in, with one southbound right-turn lane on the west side of Heacock Street. For exiting, the access road would have dual left lanes and a single right-turn lane. The remainder of the access road to the project site driveway would be expanded to 48 feet wide, with two lanes in each direction. The access driveway onto the site would be constructed to a width of 50 feet to accommodate large trucks and trailers. The Proposed Project would be developed in a single phase with an anticipated opening year of 2026. Regional access to the project site would be available from Interstate (I) 215 via Cactus Avenue and Harley Knox Boulevard.

3.12.1 Existing Conditions

This section provides a summary of the existing circulation network, the March JPA General Plan Circulation Network, other General Plan Circulation Elements, bicycle and pedestrian facilities, truck routes and transit service.

The Proposed Project is located within the southeastern portion of the March JPA jurisdiction, bounded by Heacock Street to the east, March ARB to the north and west, and existing industrial land uses to the south, in unincorporated Riverside County, California. I-215 is located approximately 1 mile west of the project site.

Existing Circulation Network

Figure 3.12-1, Roadway Network near the Project Site, illustrates the circulation network near the project site. The Proposed Project's traffic study area includes a total of 20 existing and future intersections, as shown in Figure 3.12-1. The traffic study area intersections are primarily located along Heacock Street, Harley Knox Boulevard, and within the existing industrial development east of the project site. The future extension of Heacock Street from its existing terminus to Harley Knox Boulevard is a long-range planned connection (where it would connect with the existing roundabout at Webster Avenue and Harley Knox Boulevard). Therefore, the analysis of Existing and Opening Year conditions in the Proposed Project's TA does not include this extension; however, the Horizon Year (2045) traffic conditions in the TA have been evaluated both without and with the extension, in the event that the connection is not in place by Year 2045.

The project site is located within March JPA jurisdiction, but the study area includes intersections that share borders with the neighboring jurisdictions of Caltrans, County of Riverside, City of Moreno Valley, and City of Perris.

March Joint Powers Authority Circulation Element

The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified in the March JPA General Plan Circulation Element, are described subsequently. As shown on Figure 3.12-2, the March JPA Circulation Element identifies Heacock Street as a Secondary Highway, Cactus Avenue as an Arterial/Urban Arterial Highway, and Harley Knox Boulevard as an Arterial/Urban Arterial Highway in the vicinity of the Proposed Project.

County of Riverside, City of Moreno Valley, and City of Perris General Plan Circulation Elements

The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways analyzed in the TA, as identified on the County of Riverside General Plan Circulation Element and City of Moreno Valley and Perris General Plan Circulation Elements, are included in Appendix M-1.

Truck Routes

The March JPA designated truck route map is depicted in Figure 3.12-3, March JPA Truck Routes. Truck routes within the March JPA planning area are designated to ensure that truck and commercial vehicle routes are adequately sized to meet the needs of such trucks and to eliminate truck and commercial traffic within areas not suited for such vehicles. Heacock Street south of Cardinal Avenue, Meyer Drive, Cactus Avenue, Riverside Drive, Harley Knox Boulevard, San Michele Road, and Indian Avenue are the designated March JPA truck routes within the study area. The City of Moreno Valley and the City of Perris designated truck route maps are provided in Appendix M-1. The designated truck route in the City of Moreno Valley includes Heacock Street, Cactus Avenue west of Perris

Boulevard, Indian Street south of San Michele Road, San Michele Road, and Nandina Avenue. The designated truck routes in the City of Perris in the vicinity of the project site includes Harley Knox Boulevard, Indian Avenue, and Western Way.

The designated truck route maps have been utilized to route truck traffic for the Proposed Project truck trips and for future cumulative development projects throughout the study area.

Transit Service

The March JPA planning area is currently served by the Riverside Transit Authority (RTA), a public transit agency serving the unincorporated Riverside County region. There are currently no existing bus routes that serve the roadways within the study area close to the project site. The Metrolink Perris Valley Line serves the Riverside area, providing access to the City of Perris, Riverside, Anaheim, and downtown Los Angeles. The Moreno Valley/March Field Metrolink Station is located on Meridian Parkway approximately 5 miles northwest of the project site.

Existing bus transit routes in the vicinity of the study area are illustrated in Figure 3.12-4, Public Transit Routes.

Bicycle and Pedestrian Facilities

Field observations conducted in 2019 indicate nominal pedestrian and bicycle activity within the study area (last observed pre-COVID). The March JPA General Plan does not have a bicycle and/or pedestrian facilities exhibit. There is a proposed Class II bike lane along Heacock Street between Iris Avenue and Harley Knox Boulevard that would connect to the proposed Class I bike path and Class II bike lanes along Harley Knox Boulevard. There is an existing Class II bike lane along Heacock Street between Iris Avenue and Cactus Avenue that connects to the Class II bike lane along Cactus Avenue. Existing pedestrian facilities within the study area are shown in Figure 3.12-5, Existing Pedestrian Facilities. Figures illustrating the City of Moreno Valley bike plan, City of Moreno Valley Master Plan of Trails, and the City of Perris proposed bikeways and trails improvements are included in Appendix M-1.

3.12.2 Relevant Plans, Policies, and Ordinances

The following section describes regulations, plans, policies, and ordinances relevant to the study area, including the newly implemented VMT metric for determination of significant impact. State, regional, and local regulations are described. There are no traffic-specific federal regulations applicable to the Proposed Project.

State

Senate Bill 743

On September 27, 2013, Governor Brown signed SB 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under the CEQA process for several categories of development projects including the development of infill projects in transit priority areas (i.e., areas well served by transit) and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas (GHG) emissions. SB 743 adds Chapter 2.7: Modernization of Transportation Analysis for Transit Oriented Infill Projects to the CEQA Statute (California Public Resources Code Section 21099). Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. In addition, SB 743 mandates that alternative metric(s) for

determining impacts relative to transportation shall be developed to replace the use of level of service (LOS) in CEQA documents.¹

In the past, environmental review of transportation impacts focused on the delay that vehicles experience at intersections and on roadway segments, which is often measured using LOS. Mitigation for impacts on vehicular delay often involves increasing capacity, such as by widening a roadway or the size of an intersection, which in turn encourages more vehicular travel and greater pollutant emissions. Additionally, improvements to increase vehicular capacity can often discourage alternative forms of transportation, such as biking and walking. SB 743 directed the OPR to develop an alternative metric(s) for analyzing transportation impacts in CEQA document. The alternative was meant to promote the state's goals of reducing GHG emissions and traffic-related air pollution, promoting the development of multimodal transportation system, and providing clean, efficient access to destinations. Under SB 743, it was anticipated that the focus of transportation analysis would shift from vehicle delay to VMT within transit priority areas.

Pursuant to SB 743, OPR released the draft revised CEQA Guidelines in November 2017, recommending the use of VMT for analyzing transportation impacts. Additionally, OPR released an updated Technical Advisory on Evaluating Transportation Impacts in CEQA to provide guidance on VMT analysis (OPR 2018). In this Technical Advisory, OPR provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their particular jurisdiction. While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance ... recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence" (CEQA Guidelines Section 15064.7[c]).

In December 2018, the CEQA Guidelines were updated to add a new Section 15064.3, Determining the Significance of Transportation Impacts, which describes specific considerations for evaluating a project's transportation impacts using the VMT methodology. This new methodology is required to be used for projects beginning on July 1, 2020.

CEQA Guidelines Section 15064.3(b) is divided into four subdivisions as follows:

- (1) **Land Use Projects.** Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- (2) **Transportation Projects.** Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

¹ As described in the Proposed Project's TA (Appendix M-1) and per standard practice, the traffic operations of roadway facilities are described using the term "LOS." This is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined, ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

- (3) **Qualitative Analysis.** If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
- (4) **Methodology.** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

The Proposed Project is a land use development; therefore, Section 15064.3(b)(1) would apply, and transportation impacts have been assessed using the VMT metric.

Sustainable Communities Strategies: Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the state's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, the California Air Resources Board (CARB) sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the state's metropolitan planning organizations (MPOs). CARB will periodically review and update the targets, as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its Regional Transportation Plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy to meet the targets. The alternative planning strategy is not a part of the RTP.

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the alternative planning strategy. Developers can get relief from certain CEQA requirements if their new residential and mixed-use projects are consistent with a region's SCS (or alternative planning strategy) that meets the targets (see California Public Resources Code Sections 21155, 21155.1, 21155.2, and 21159.28).

Caltrans

The Caltrans Transportation Impact Study Guide, May 20, 2020, has replaced the 2002 Guide for the Preparation of Traffic Impact Studies. Per the 2020 Transportation Impact Study Guide, Caltrans's primary review focus is VMT, replacing LOS as the metric used in CEQA transportation analyses (Caltrans 2020b). Caltrans recommends use of OPR's recommended thresholds and guidance on methods of VMT assessment found in OPR's Technical Advisory (OPR 2018) for land use projects. In addition to VMT, the 2020 Transportation Impact Study Guide states that it

may request a targeted operational and safety analysis to address a specific geometric or operational issue related to the state highway system and connections with the state highway system.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) develops the RTP that presents the transportation vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura Counties. SB 375 was enacted to reduce GHG emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under the law, SCAG is tasked with developing an SCS, an element of the RTP that provides a plan for meeting emissions reduction targets set forth by CARB.

The RTP/SCS identifies priorities for transportation planning within the Southern California region, sets goals and policies, and identifies performance measures for transportation improvements to ensure that future projects are consistent with other planning goals for the area (SCAG 2020). To qualify for CEQA streamlining benefits under SB 375, a project must be consistent with the RTP/SCS. On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy), which replaced the 2016–2040 RTP/SCS (SCAG 2016).

Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians (SCAG 2020).

Local

County of Riverside Congestion Management Program

The passage of Proposition 111 in June 1990 established a process for each metropolitan county in California that has an urbanized area with a population over 50,000 (which would include the County of Riverside [County]) to prepare a Congestion Management Program (CMP). In addition, the passage of Proposition 111 provided additional transportation funding through a \$0.09 per gallon increase in the state gas tax. The Riverside County Transportation Commission was designated as the Congestion Management Agency in 1990; therefore, it prepares the CMP updates.

Although implementation of the CMP was made voluntary by the passage of Assembly Bill 2419, the CMP requirement has been retained in all five urbanized counties within the SCAG region. In addition to their value as a transportation management tool, CMPs have been retained in these counties because of the federal Congestion Management System requirement that applies to all large, urban areas that are not in attainment of federal air quality standards. These counties recognize that the CMP provides a mechanism through which locally implemented programs can fulfill most aspects of a regional requirement that would otherwise have to be addressed by the regional agency (for the County of Riverside, SCAG).

The CMP is prepared by the Riverside County Transportation Commission and developed in consultation with the county and cities in Riverside County. The CMP represents an effort to more directly align land use, transportation, and air quality management efforts and to promote reasonable growth management programs that effectively use

statewide transportation funds while ensuring that new development pays its fair share of needed transportation improvements (RCTC 2011).

Per the CMP-adopted LOS standard of E, when a CMP facility falls to LOS F, a deficiency plan is required. Preparation of a deficiency plan would be the responsibility of the local agency where the deficiency is located. Other agencies identified as contributors to the deficiency would also be required to coordinate with the development of the plan. The plan must contain mitigation measures, including transportation demand management strategies and transit alternatives, and a schedule for mitigating the deficiency. To ensure that the Congestion Management System is appropriately monitored to reduce the occurrence of CMP deficiencies, it is the responsibility of local agencies, when reviewing and approving development proposals, to consider the traffic deficiencies of the Congestion Management System.

The CMP was most recently updated in 2019 as part of the Riverside County Long Range Transportation Study.

Transportation Uniform Mitigation Fee

WRCOG is responsible for establishing and updating the Transportation Uniform Mitigation Fee (TUMF) program. The TUMF program is a multi-jurisdictional impact fee program that funds transportation improvements on a regional and subregional basis associated with new growth. All new development in each of the participating jurisdictions is subject to a TUMF, based on the proposed intensity and type of development. TUMFs are submitted by the project applicant and are passed on to WRCOG as the ultimate program administrator. TUMF program funds are distributed on a formula basis to the regional, local, and transit components of the program. March JPA participates in the TUMF program.

The TUMF program is based upon a regional Nexus Study completed in early 2003 and updated in 2016 to address major changes in right-of-way acquisition and improvement cost factors. TUMF identifies a network of backbone and local roadways that are needed to accommodate growth through 2040. This regional program was put into place to ensure that development pays its fair share and that funding is in place for construction of facilities that are needed to maintain the requisite LOS and are critical to mobility in the region. TUMFs and other applicable fair-share contributions are collected as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected vehicle trip increases.

Measure A

Measure A, Riverside County's half-cent sales tax for transportation, was adopted by voters in 1988 and extended in 2002. It will continue to fund transportation improvements through 2039. Measure A funds a wide variety of transportation projects and services throughout the County. The Riverside County Transportation Commission is responsible for administering the program. Measure A dollars are spent in accordance with an expenditure plan that was approved by voters in 1988.

March Joint Powers Authority Traffic Impact Study Preparation Guide

Based on the March JPA Traffic Impact Study Preparation Guide (March JPA 2020), all intersections and roadway segments within the March JPA planning area shall operate at LOS D or better with limiting circumstances of LOS E to occur. LOS E may also be allowed to the extent that would support transit-oriented development and walkable communities. A lower LOS in transit-oriented development environments encourages people to shift from dependency on single-occupancy vehicles to use of public transit and other modes of transportation. This is

acceptable in transit-oriented development environments because alternative modes of transportation are readily accessible and are more convenient than in non-transit-oriented development land use environments. LOS E is also acceptable during peak hours at interchange ramp intersections where ramp metering occurs. The Proposed Project would not be a transit-oriented development and neither the Alessandro Boulevard nor the Cactus Avenue on-ramps are currently metered; as such, for informational purposes, the minimum LOS would be LOS D.

March Joint Powers Authority General Plan

The Transportation Element of the March JPA General Plan includes goals and policies related to transportation. The following goals and policies from the March JPA General Plan apply to the Proposed Project (March JPA 1999):

Goal 2: Build and maintain a transportation system which capitalizes on the multi-faceted elements of transportation planning and systems, designed to meet the needs of the planning area while minimizing negative effects on air quality, the environment and adjacent land uses and jurisdictions.

Policy 2.1: March JPA shall balance the need for free traffic flow with economic realities and environmental and aesthetic consideration, such that transportation facilities are capable of normal patterns and volume, with tolerance of peak and high level usage with minimal disruption, delays or impacts.

Policy 2.6: FAA standards, military AICUZ, and appropriate Comprehensive Land Use Plan for March Airfield shall be upheld and supported to encourage and realize a safe environment in and around the aviation field.

Policy 2.7: On-street parking shall be de-emphasized throughout the planning area to permit maximum capacity of roadways to be actuated by vehicular and bicycle transportation modes.

Goal 3: Develop a transportation system that is safe, convenient, efficient and provides adequate capacity to meet local and regional demands.

Policy 3.5: Driveway entrances onto surrounding arterial highways, major and minor arterials streets should be redistricted when practical, and through traffic on interior streets should be minimized.

Goal 4: Provide a balanced transportation system that ensures the safe and efficient movement of people and goods throughout the planning area, while minimizing the use of land for transportation facilities.

Policy 4.3: Arterial roads should carry both local and through traffic and be planned and improved to maintain a Level of Service "D" or better with limiting circumstances of Level of Service "E" to occur.

Policy 4.4: Through traffic planning, measures should be implemented to alleviate direct impacts to adjoining jurisdictions which decrease roadway function Level of Service below the jurisdiction's adopted accepted Level of Service, as appropriate.

Policy 4.5: Require the dedication and improvement of arterial roadways prior to the issuance of certificates of occupancy.

Goal 6: Establish vehicular access control policies in order to maintain and insure the effectiveness and capacity of arterial roadways.

Policy 6.1: To the extent possible, access shall be provided on local or collector streets where the frontage is available on both local and arterials streets.

Policy 6.2: Access to an arterial road shall be limited to one point for every 300 feet of frontage or one point for parcels with less than 300 feet of frontage.

Goal 9: Develop measures which will reduce the number of vehicle miles traveled during peak travel periods.

Policy 9.2: Provide preferential parking for carpools and vanpools, where appropriate.

Goal 10: Regulate the travel of trucks on March JPA Planning Area streets.

Policy 10.1: Establish a truck route system which designates truck commercial vehicle routes and provides adequately sized and designated roadways to meet the needs of trucks and commercial vehicles. This will eliminate truck and commercial vehicle traffic through inappropriate areas of the March JPA Planning Area.

Goal 11: Adequate off-street parking for all land uses shall be provided which requires adequate on-site parking to prevent spill over on the adjacent street system.

Goal 13: Promote, preserve and protect the joint use of the aviation field by the Air Force Reserves and civilian aviation.

Goal 15: In accordance with state and federal law, promote and provide mobility for the disabled.

Policy 15.1: Require that all development comply with the requirements of the state and federal law for the disabled. Requirements may include ramps at street corners, access to public buildings, traffic signal timing and the like.

Environmental Justice Element

In April 2024, March JPA adopted an Environmental Justice Element (March JPA 2024). The March JPA Environmental Justice Element incorporates the environmental justice policies of the County of Riverside Healthy Communities Element pursuant to California Government Code Section 65301(a). The County of Riverside Board of Supervisors adopted environmental justice policies by Resolution 2021-182 on September 21, 2021. The goal of the Environmental Justice Element is to ensure the consideration of environmental justice policies to improve public health and the environment within the March JPA Planning Area. Policies and new land use development proposed within the March JPA Planning Area will be evaluated for promoting all environmental justice policies. The land use entitlement process provides a key opportunity to address environmental justice policies through the creation of safe, healthy, and environmentally sustainable communities. The following policy would be relevant to the Proposed Project:

Policy HC 16.5: Evaluate the compatibility of unhealthy and polluting land uses being located near sensitive receptors including possible impacts on ingress, egress, and access routes. Similarly,

encourage sensitive receptors, such as housing, schools, hospitals, clinics, and childcare facilities to be located away from uses that pose potential hazards to human health and safety.

County of Riverside General Plan

The Circulation Element of the County of Riverside General Plan includes policies related to traffic that require County facilities to maintain LOS C, except in certain Area Plans and Community Development Areas where LOS D is the standard that should be maintained. Intersections in the study area that fall under County of Riverside jurisdiction are within the Community Development Areas of Mead Valley and Lake Mathews/Woodcrest. These Community Development Areas are required to maintain the LOS standard of D (County of Riverside 2020).

City of Moreno Valley General Plan

The City of Moreno Valley's General Plan Circulation Element is a policy guide for the planning and development of the Moreno Valley, including parameters for the transportation system (roadway network, public transportation, and bicycle facilities), circulation improvements, traffic LOS, and pedestrian safety. The City of Moreno Valley analyzes the operation of the roadway system in terms of LOS. Similar to March JPA, the City of Moreno Valley considers LOS D as the upper limit of satisfactory operations for intersections and roadway segments that are adjacent to freeway on- and off-ramps, and/or adjacent to employment-generating land uses.

City of Perris General Plan

The City of Perris's General Plan Circulation Element is a policy planning document that provides goals and policies designed to allow for a safe, convenient, and efficient transportation system for the city, including parameters for the transportation system (roadway network, public transportation, pedestrian facilities, and bicycle facilities), circulation improvements, traffic LOS, and pedestrian safety. The City of Perris analyzes the operation of the roadway system in terms of LOS. Similar to March JPA, the City of Perris considers LOS D as the upper limit of satisfactory operations for intersections and roadway segments within city-maintained roads/intersections, with an exception to allow for LOS E at intersections of any arterials and expressways with State Route 74, the Ramona-Cajalco Expressway, or the I-215 on- and off-ramps.

3.12.3 Project Design Features

The following PDF has been incorporated into the Proposed Project as described in the impacts analysis in Section 3.12.5. This PDF is also provided in Section 2.4.4, Project Design Features. Although Project Design Features are already part of the Project, they will also be included as separate conditions of approval and included in the Mitigation Monitoring and Reporting Program (MMRP). March JPA will monitor compliance through the MMRP.

PDF-TRA-1 Payment of Fair-Share Cost. To address operational deficiencies at off-site intersections, prior to the issuance of a certificate of occupancy, the Proposed Project shall contribute \$281,498 (with Heacock Street Extension) as its fair share toward the improvement measures provided in Table 1-5, Summary of Improvements and Rough Order of Magnitude Costs – with Heacock Street Extension, of the Traffic Analysis (Appendix M-1 to this EIR).

3.12.4 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's potential impacts related to transportation are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, as applicable, the March JPA CEQA Guidelines (March JPA 2022). According to the CEQA Guidelines, a significant impact related to transportation would occur if a project would:

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- d) Result in inadequate emergency access.

As discussed in the Initial Study prepared for the Proposed Project (Appendix A-2), the Proposed Project would result in a less-than-significant impact related to substantially increasing hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment), as well as a less-than-significant impact regarding the potential to result in inadequate emergency access. However, per comments received on the transportation analysis to include queuing at Caltrans facilities, the threshold related to substantially increasing hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment) has been discussed in this section. The threshold related to emergency access was not analyzed further in this section of the EIR. For details regarding this threshold, please refer to Chapter 4, Other CEQA Considerations, for a discussion of effects found not to be significant, and the Initial Study included as Appendix A-2 of this EIR.

VMT Impact Thresholds

The updated CEQA Guidelines themselves do not establish a significance threshold for VMT impacts. March JPA has yet to adopt its own VMT analysis guidelines and thresholds. Therefore, the recommended VMT analysis methodology and thresholds identified within the OPR Technical Advisory and WRCOG Guidelines have been used to analyze the Proposed Project's impacts. Further, consistency with the applicable RTP is required for all land use projects.

For projects that are not residential or retail land use types, the Technical Advisory identifies VMT per employee as the appropriate VMT metric for analysis. Therefore, the Proposed Project's land uses should be evaluated based on the metric of VMT per employee. A significant impact to VMT would occur if the addition of the Proposed Project would result in Proposed Project-generated VMT per employee to exceed 15% below the WRCOG's baseline of 29.97 VMT per employee, for a regional average significance threshold of 25.47 VMT per employee. These values were calculated and derived from the Riverside County Transportation Demand Model (RIVCOM) base year and cumulative traffic models and then interpolated for the baseline 2022 year for the entire WRCOG region.

Per the Technical Advisory, for cumulative or long-term VMT impact threshold, "a project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa. This is similar to the analysis typically conducted for greenhouse gas emissions, air quality impacts, and impacts that utilize plan compliance as a threshold of significance" (OPR 2018).

Caltrans Facilities Impact Threshold

The Caltrans Safety Review Guidance applies to proposed land use projects and plans affecting the state highway system (Caltrans 2020a). The intent of the Safety Review is to provide an outline for when queuing should be reviewed for traffic safety impacts. A review does not necessitate traffic safety mitigation but evaluates whether a significant safety impact based on speed differential would occur, and then the significance of the project's traffic safety impact must be determined on a case-by-case basis.

Per Appendix A, Freeway Queuing Analysis, of the Caltrans Safety Review Guidance, to review a location for traffic safety impacts, the following criteria can be used (Caltrans 2020a):

If the project adds two or more car lengths to the ramp queue in the peak hour that will extend into the freeway mainline, then the location must be reviewed for traffic safety impacts which include a review for speed differential between the off-ramp queue and the mainline of the freeway during the same peak hour. Additionally, Caltrans review of site design for access management for projects near the state highway system could include the following:

- Sight distance constraints caused by placement of a driveway
- Driveway or intersection spacing
- Queuing onto roadways caused by project access design features such as driveway placement near ramp intersections or missing left turn pockets
- Multimodal conflict points caused by turning vehicles
- Pedestrian and bicycle connections from the state highway to the entrance(s) of the new land use that are incomplete

For the purposes of the analysis in this EIR, impacts to traffic and circulation would be significant if the Proposed Project would:

- TRA-1** Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- TRA-2** Conflict or be inconsistent with the CEQA Guidelines § 15064.3, subdivision (b).
- TRA-3** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Methodology

VMT Analysis

WRCOG Guidelines identify RIVCOM as the appropriate tool for conducting VMT analysis for land development projects in the March JPA planning area. WRCOG is the developer/owner of RIVCOM and recently launched the new modeling tool for use by its member agencies in August 2021. The Proposed Project's VMT Analysis (Appendix M-2A) was prepared using the latest available version of the modeling tool, i.e., RIVCOM Version 3.0.

Off-Ramp Queuing Analysis

Consistent with Caltrans requirements, the 95th percentile queuing of vehicles was assessed in the TA at the off-ramps to determine potential queuing deficiencies at the freeway ramp intersections at I-215 at the Harley Knox Boulevard interchange. Specifically, the TA utilized the queuing analysis to identify any potential queuing and “spill back” onto the I-215 mainline from the off-ramps. The TA utilized the traffic progression analysis tool and Highway Capacity Manual (HCM) intersection analysis program, Synchro, to assess the potential deficiencies/needs of the intersections with traffic added by the Proposed Project. Storage (turn-pocket) length recommendations at the ramps were based on the 95th percentile queue resulting from the Synchro progression analysis. The footnote from the Synchro output sheets in the TA indicated if the 95th percentile cycle exceeded capacity. Traffic was simulated for two complete cycles of the 95th percentile traffic in Synchro to account for the impacts of spillover between cycles. In practice, the 95th percentile queue shown would rarely be exceeded and the queues shown with the footnote are acceptable for the design of storage bays.

3.12.5 Impacts Analysis

Threshold TRA-1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less-Than-Significant Impact with Mitigation Incorporated.

Construction

Development of the Proposed Project is not anticipated to require the construction of any off-site transportation improvements. Traffic operations during the construction phase of the Proposed Project may potentially result in short-term traffic deficiencies related to construction employees and import of construction materials. It is anticipated that the following construction-related activities would generate traffic and may potentially result in temporary construction-related traffic deficiencies:

- Construction employee commutes
- Import of construction materials
- Transport and use of heavy construction equipment

To minimize the impact of construction activities, **Mitigation Measure (MM) TRA-1** requires the project applicant to develop and implement a March JPA-approved Construction Traffic Management Plan, which would ensure that construction traffic would be routed to avoid travel through or next to sensitive land uses, and that, to the extent practical, construction traffic would access the project site during off-peak hours (refer to Section 3.12.6, Mitigation Measures, for text of **MM-TRA-1**). Therefore, impacts would be **less than significant with mitigation incorporated**.

Operations

The project site would be accessed through the planned and existing streets in the area. Access to the project site would be provided from Heacock Street via expansion of the existing access roadway, which would be signalized.

The truck traffic from the Proposed Project would use existing truck routes along Heacock Street, Nandina Avenue, Indiana Avenue, Harley Knox Boulevard, and I-215. Implementation of **MM-TRA-2** (Project Truck Route on Heacock Street) as part of the Proposed Project would ensure that trucks entering and exiting the project site would travel south along Heacock Street, utilizing the Harley Knox Boulevard interchange at I-215, as analyzed in the Proposed Project's TA and determined to be an appropriate truck route for the Proposed Project by March JPA (refer to Section 3.12.6, Mitigation Measures, for text of **MM-TRA-2**). With implementation of **MM-TRA-2**, operational impacts to the circulation system would be **less than significant with mitigation incorporated**.

Heacock Street includes Class II (on-street, striped) bike lanes up to Iris Avenue and has a proposed Class II bike lane south of Iris Avenue to its southern terminus. There are paved and discontinuous sidewalks along Heacock Street on its eastern side.

The March JPA planning area is currently served by the Riverside Transit Authority, a public transit agency serving the unincorporated Riverside County region. There are currently no existing bus routes that serve the roadways within the study area close to the project site.

There is nominal pedestrian and bicycle traffic in the vicinity of the project site. Additionally, none of the above-mentioned improvements would impede public transit, roadway, bicycle, or pedestrian facilities. The Proposed Project would not include any improvements that would interfere with the construction of pedestrian or bicycle facilities in the future. Therefore, no impacts to alternative transportation facilities would occur, and no mitigation measures are required.

General Plan Consistency

The Proposed Project's potential impacts relative to the operational and General Plan LOS consistency used by March JPA and the cities or agencies that have jurisdiction over each of the study intersections are provided in the Proposed Project's TA (Appendix M-1). However, in accordance with CEQA Guidelines Section 15064.3(a), LOS is not used as a metric to identify transportation impacts under CEQA.

The Proposed Project is consistent with relevant goals and policies from the March JPA General Plan noted in Section 3.12.2, Relevant Plans, Policies, and Ordinances, including those related to transit, roadway, bicycle, and pedestrian facilities. Consistent with Goal 3 and Goal 11, the proposed expansion of the existing access roadway, project site driveway, internal circulation, and parking would be designed and constructed according to March JPA standards. Project site access would be provided from a driveway off the expanded existing access roadway and a new signalized intersection onto Heacock Street. The Proposed Project's improvements to the existing access roadway and its intersection with Heacock Street would be designed to accommodate existing traffic, plus anticipated traffic generated by the Proposed Project and future growth in the area.

Consistent with Goal 4, improvements to the circulation system would be limited to the project site and existing public right-of-way, thus minimizing land necessary for transportation facilities.

Consistent with Goal 10, regional truck access to the project site would be from I-215 at Harley Knox Boulevard. Trucks would follow the designated truck route, traveling north on Heacock Street to the proposed signalized intersection to access the project site. Consistent with Goal 11, the Proposed Project would consist of development of a gateway air freight cargo center that can utilize existing infrastructure at

the March Inland Port Airport and within March ARB. In addition to the proposed on-site cargo building, the project applicant would expand the existing tarmac to allow for improved access to the existing taxiway for the future tenants and existing airport users south of the project site. Consistent with Goal 15, all circulation improvements would comply with applicable Americans with Disabilities Act requirements, as required by federal and state law.

As such, the Proposed Project would not conflict with any General Plan policies addressing the circulation system (see Section 3.10, Land Use and Planning, of this EIR for a detailed analysis of the Proposed Project's consistency with March JPA General Plan goals and policies, including the Environmental Justice Element). Therefore, impacts would be **less than significant**.

RTP/SCS Consistency Analysis

The SCAG RTP/SCS establishes regional policies and goals for transportation to improve mobility, promote sustainability, facilitate economic development, and preserve the quality of life for residents in the region (SCAG 2016). On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020-2045 RTP/SCS).

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS. Lead agencies have the sole discretion in determining a project's consistency with the RTP/SCS. As discussed in Section 3.12.8, Cumulative Effects, the Proposed Project would encourage regional economic prosperity and global competitiveness; improve mobility, accessibility, reliability, and travel safety for people and goods; and adapt to a changing climate and support an integrated regional development pattern and transportation network to meet regional demands for air cargo services within Southern California and the greater region, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region. Therefore, the Proposed Project would not have a significant VMT impact and would be consistent with the goals of the RTP/SCS, and **no impact** would occur.

Threshold TRA-2: Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less-Than-Significant Impact.

CEQA Guidelines Section 15064.3(b) focuses on VMT criteria adopted pursuant to SB 743 for determining the significance of transportation impacts. This section summarizes the Proposed Project's VMT Analysis. The methodologies described are consistent with the OPR's Technical Advisory (OPR 2018), WRCOG's updated Traffic Impact Analysis Guidelines (WRCOG 2020), and March JPA's CEQA Guidelines (March JPA 2022). A project's VMT analysis follows the process of using screening criteria, identifying an efficiency metric, identifying the significance threshold, and determining requirements for modeling and assessment. VMT screening criteria are based on the results of the Transit Priority Area Screening, Low VMT Area Screening, or Project Type Screening, and projects that meet the screening thresholds based on their location and project type may be presumed to result in a less-than-significant transportation impact. However, March JPA has not specified use of screening criteria; therefore, a detailed VMT analysis was conducted for the Proposed Project.

An assessment of the Proposed Project's VMT impact under base year conditions has been conducted using the following methodology.

VMT Metric and Threshold

For projects that are not residential or retail land use types, the OPR’s Technical Advisory identifies VMT per employee as the appropriate VMT metric for analysis (OPR 2018). Therefore, the Proposed Project’s land uses should be evaluated based on the metric of VMT per employee. A significant impact to VMT would occur if the addition of the Proposed Project’s industrial component would result in Proposed Project-generated VMT per employee to exceed 15% below the WRCOG’s baseline of 29.97 VMT per employee, for a regional average significance threshold of 25.47 VMT per employee.²

The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle. RIVCOM is a useful tool to estimate VMT because it considers interaction between different land uses based on socioeconomic data such as population, households, and employment. The WRCOG Guidelines identify RIVCOM as the appropriate tool for conducting VMT analysis for land use projects in the March JPA area. Proposed Project VMT has been calculated using RIVCOM Version 3.0.

To evaluate Proposed Project VMT, standard land use information must first be converted into RIVCOM-compatible input data. The RIVCOM model uses socioeconomic data (e.g., population, households, employment) instead of land use information for the purposes of vehicle trip estimation. Project land use information, such as building square footage, must first be converted to socioeconomic data for input into RIVCOM. Table 3.12-1 summarizes the employment estimates for the Proposed Project.

Table 3.12-1. Employment Estimates

Land Use	Quantity (Square Feet)	Estimated Employees ^a
Air Freight Cargo Center	180,800	150

Source: Appendix M-2.

Note:

^a This estimate is based on market understanding of potential tenants’ use.

The RIVCOM model was then run inclusive of the Proposed Project’s socioeconomic data inputs.

Proposed Project VMT

The Technical Advisory identifies that for land uses other than residential and retail, the measure of VMT should be VMT per employee. RIVCOM was used to calculate Proposed Project-generated VMT for the non-retail employment generating land uses, and that value was then divided by the Proposed Project’s employment estimate to derive Proposed Project-generated VMT per employee. The Proposed Project-generated home-based work VMT was then calculated for both the base-year model (2018) and the cumulative year model (2045), and linear interpolation was used to determine the Proposed Project’s baseline (2022) home-based work VMT. Table 3.12-2 shows home-based work VMT as calculated from RIVCOM for the Proposed Project’s land uses, the number of Proposed Project employees, and Proposed Project VMT per employee.

² These values were calculated and derived from the Riverside County Transportation Demand Model RIVCOM base-year and cumulative traffic models and then interpolated for the baseline 2022 year for the entire WRCOG region.

Table 3.12-2. VMT per Employee

Metric	Base Year (2018)	Baseline (2022)	Cumulative (2045)
Home-based work VMT	3,546	3,468	3,017
Employment	150	150	150
Home-based work VMT per employee ^a	23.64	23.12	20.11

Source: Appendix M-2.

Notes: VMT = vehicle miles traveled.

^a Home-based work VMT per employee is a measure of all auto trips between home and work, and does not include heavy-duty truck trips or freight, which is consistent with OPR guidance.

Table 3.12-3 provides a comparison between Proposed Project VMT per employee to the WRCOG significance threshold of 25.47.

Table 3.12-3. Project VMT per Employee Comparison

Metric	VMT per Employee
WRCOG existing baseline	29.97
Impact threshold (15% below baseline)	25.47
Proposed Project	23.12
Percent below threshold	9.23%
Potentially significant?	No

Source: Appendix M-2.

Notes: VMT = vehicle miles traveled; WRCOG = Western Riverside Council of Governments.

The Proposed Project’s VMT per employee of 23.12 was found to be below the WRCOG significance threshold of 25.47 VMT per employee (i.e., approximately 9.23% below the threshold). Therefore, the Proposed Project’s VMT impact would be **less than significant**.

Threshold TRA-3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?

The following discussion describes the potential for increased hazards as a result of geometric design features of the Proposed Project, and/or as a result of the addition of Proposed Project traffic to Caltrans facilities and the project site access from Heacock Street. The section also discusses the Proposed Project’s access consistent with Caltrans requirements. The 95th percentile vehicle queues were assessed at the off-ramps to determine potential queuing deficiencies at the freeway ramp intersections at the I-215 ramps at the Harley Knox Boulevard interchange. Specifically, the queuing analysis was used to identify any potential queuing and “spill back” onto the I-215 mainline from the off-ramps, which would be considered a hazard.

Off-Ramp Queuing Analysis

Less-Than-Significant Impact. A queuing analysis was performed for the off-ramps at the I-215 at the Harley Knox Boulevard interchange. The analysis was conducted for Existing conditions, Existing plus Project conditions, Horizon Year (2045) with and without Heacock Street Extension, and Horizon Year (2045) with and without Heacock Street Extension with Project conditions. The analysis indicates there are

currently no queuing issues that may potentially “spill back” onto the I-215 mainline at the study area interchange. As shown in the Proposed Project’s TA and Tables 3.12-4 and 3.12-5, there are no movements where the 95th percentile queues would exceed their storage lengths during the weekday AM or weekday PM peak hours Horizon Year (2045) without and with Project under both peak and non-peak traffic conditions. The geometric configuration of the ramp intersections was assumed to be same for all the analysis scenarios.

The queues at the I-215 at the Harley Knox Boulevard interchange would increase nominally due to addition of Proposed Project trips; however, none of the queues are reported to spill back onto I-215 or add two or more car lengths to the ramp queues in the peak hours that would extend into the freeway mainline per Caltrans criteria. Impacts to Caltrans facilities would be **less than significant**.

Proposed Project Access Analysis

Less-Than-Significant Impact. A queuing analysis was also performed for the intersections of Heacock Street/existing access roadway and Heacock Street/Cardinal Avenue to determine the adequacy of the Proposed Project’s access design features and intersection geometry. The results of the queuing analysis for Horizon Year (2045) without and with Heacock Street conditions with peak and non-peak traffic conditions are provided in the Proposed Project’s TA (Appendix M-1). There would be no anticipated queuing issues at the intersections of Heacock Street/existing access roadway and Heacock Street/Cardinal Avenue under Horizon Year (2045) with Project (Non-Peak) and with Project (Peak), for both without and with Heacock Street Extension conditions.

Due to the typical wide turning radius of large trucks, a truck turning template was overlaid on the site plan at the intersection of the existing access roadway and Heacock Street, which would be utilized by heavy trucks, to determine appropriate curb radii and to verify that trucks would have sufficient space to execute turning maneuvers. As shown on Exhibit 1-6 in the TA (Appendix M-1), the intersection of Heacock Street/existing access roadway would accommodate the ingress and egress of heavy trucks as currently designed.

Therefore, the Proposed Project would not increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. Proposed Project impacts would be **less than significant**.

Table 3.12-4. Peak Hour Freeway Off-Ramp Queuing Summary for Horizon Year (2045) Conditions without Heacock Street Extension

Intersection	Movement	Available Stacking Distance (Feet)	2045 without Proposed Project				2045 with Proposed Project (Non-Peak)				2045 with Proposed Project (Peak)			
			95th Percentile Queue (Feet)		Acceptable? ^a		95th Percentile Queue (Feet)		Acceptable? ^a		95th Percentile Queue (Feet)		Acceptable? ^a	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps & Harley Knox Blvd.	SB L/T	1,330	838 ^b	451 ^b	Yes	Yes	856 ^b	470 ^b	Yes	Yes	863 ^b	478 ^b	Yes	Yes
	SB R	270	49	45	Yes	Yes	50	45	Yes	Yes	51	45	Yes	Yes
I-215 NB Ramps & Harley Knox Blvd.	NB L/T	1,120	65 ^b	47	Yes	Yes	65	47	Yes	Yes	65 ^b	47	Yes	Yes
	NB R	265	245 ^b	266 ^b	Yes	Yes	263 ^b	273 ^b	Yes	Yes	272 ^b	276 ^b	Yes	Yes

Notes: SB = southbound; L/T = shared left-through lane; R = right; NB = northbound.

^a Stacking distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking, which is assumed to be provided in the transition for turn pockets, is reflected in the stacking distance shown in this table, where applicable

^b 95th percentile volume exceeds capacity; queue may be longer. Queue shown is maximum after two cycles.

Table 3.12-5. Peak Hour Freeway Off-Ramp Queuing Summary for Horizon Year (2045) Conditions with Heacock Street Extension

Intersection	Movement	Available Stacking Distance (Feet)	2045 without Proposed Project				2045 with Proposed Project (Non-Peak)				2045 with Proposed Project (Peak)			
			95th Percentile Queue (Feet)		Acceptable? ^a		95th Percentile Queue (Feet)		Acceptable? ^a		95th Percentile Queue (Feet)		Acceptable? ^a	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps & Harley Knox Blvd.	SB L/T	1,330	837 ^b	451 ^b	Yes	Yes	858 ^b	465 ^b	Yes	Yes	868 ^b	472 ^b	Yes	Yes
	SB R	270	49	45	Yes	Yes	51	45	Yes	Yes	52	45	Yes	Yes
I-215 NB Ramps & Harley Knox Blvd.	NB L/T	1,120	79 ^b	46	Yes	Yes	79	46	Yes	Yes	79 ^b	46	Yes	Yes
	NB R	265	245 ^b	266 ^b	Yes	Yes	263 ^b	272 ^b	Yes	Yes	272 ^b	275 ^b	Yes	Yes

Notes: SB = southbound; L/T = left turn; R = right; NB = northbound.

^a Stacking distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking, which is assumed to be provided in the transition for turn pockets, is reflected in the stacking distance shown in this table, where applicable.

^b 95th percentile volume exceeds capacity; queue may be longer. Queue shown is maximum after two cycles.

3.12.6 Mitigation Measures

The Proposed Project's potentially significant impacts would be reduced to less than significant with implementation of the following mitigation measures:

MM-TRA-1 Construction Traffic Management Plan. Prior to the issuance of building permits, the applicant shall develop and implement a March Joint Powers Authority-approved Construction Traffic Management Plan (CTMP) addressing potential construction-related traffic detours and disruptions to ensure that to the extent practical, construction traffic would access the project site during off-peak hours; and shall include, but not be limited to, the following measures:

- Maintain existing access for land uses in proximity of the project site throughout construction.
- Designate an on-site employee parking area.
- Schedule deliveries and pickups of construction materials during non-peak travel periods.
- Minimize obstruction of through traffic lanes on Heacock Street.
- Ensure that construction equipment traffic from the contractors is controlled by flagman.
- Identify designated transport routes for heavy trucks to be used throughout Project construction.
- Schedule vehicle movements to ensure that there are no vehicles waiting off site and impeding public traffic flow on the surrounding streets.
- Establish requirements for loading/unloading and storage of materials on the project site, where parking spaces would be encumbered; length of time traffic travel lanes can be encumbered; and sidewalk closings or pedestrian diversions to ensure the safety of the pedestrian and access to adjacent businesses and/or properties. Ensure that any travel lane encumbrances do not occur during peak traffic hours.
- Coordinate with adjacent or affected businesses and/or properties and emergency service providers to ensure that adequate access exists to the project site and neighboring sites.
- Route construction traffic to avoid travel through, or proximate to, sensitive land uses.
- Provide all construction contractors with written information on the CTMP, along with clear consequences to violators for failure to follow the CTMP.
- Post signage on Heacock Street with contact information for the project manager for public questions or concerns about construction traffic. Ensure that a response to comments or inquiries is provided within 72 hours of receipt.

MM-TRA-2 Project Truck Route on Heacock Street. The project applicant shall ensure that all leasing agreements for the Proposed Project require that all Proposed Project truck traffic utilize the Harley Knox Boulevard interchange at I-215 and the designated truck routes to the south of the project site. The intersection improvements at Heacock Street shall include installed signage directing trucks to the Harley Knox Boulevard interchange.

3.12.7 Level of Significance after Mitigation

Impacts to transportation can be mitigated to less than significant by incorporating the mitigation measures described in Section 3.12.5 and provided in Section 3.12.6. Therefore, no significant adverse impacts would remain after mitigation; impacts to transportation would be **less than significant with mitigation incorporated**.

3.12.8 Cumulative Effects

Regarding the Proposed Project's cumulative effect on VMT, the Technical Advisory states the following (OPR 2018):

A project's cumulative impacts are based on an assessment of whether the 'incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.' (Pub. Resources Code, § 21083, subd. (b)(2); see CEQA Guidelines, § 15064, subd. (h)(1).) When using an absolute VMT metric, i.e., total VMT (as recommended for retail and transportation projects), analyzing the combined impacts for a cumulative impacts analysis may be appropriate. However, metrics such as VMT per capita or VMT per employee, i.e., metrics framed in terms of efficiency (as recommended below for use on residential and office projects), cannot be summed because they employ a denominator. A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa. This is similar to the analysis typically conducted for greenhouse gas emissions, air quality impacts, and impacts that utilize plan compliance as a threshold of significance.

Per WRCOG guidelines, if the baseline project VMT results in a less-than-significant impact, then cumulative analysis may not be required. The WRCOG study also notes that, as such, if a project is consistent with the regional RTP/SCS, then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence. As shown in this section and Table 3.12-2, because the VMT per employee estimated for the Proposed Project does not exceed the WRCOG significance threshold under base year with Proposed Project conditions, it would also imply a less-than-significant cumulative impact. Additionally, the cumulative (Year 2045) VMT per employee of 20.11 is below the baseline threshold of 25.47 VMT per employee.

As shown in Section 3.12.5, the Proposed Project's impact on VMT would be less than significant. The Proposed Project is consistent with the overarching goals of Connect SoCal because it would encourage regional economic prosperity and global competitiveness; improve mobility, accessibility, reliability, and travel safety for people and goods; and adapt to a changing climate and support an integrated regional development pattern and transportation network to meet regional demands for air cargo services within Southern California and the greater region, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region. Therefore, per WRCOG guidance it would have a less-than-significant VMT impact under cumulative conditions. Hence, the Proposed Project's cumulative impact would be **less than cumulatively considerable**.

3.12.9 Traffic Analysis (Non-CEQA Analysis)

The TA (Appendix M-1) provides analysis of the Proposed Project's potential effects relative to General Plan consistency with LOS policies used by the March JPA and the cities or agencies that have jurisdiction over each of the study intersections. Pursuant to California Public Resources Code Section 21099(b)(2) and CEQA Guidelines Section 15064.3(a), a project's effect on automobile delay is not considered a significant environmental effect. This discussion is for informational purposes.

A traffic study scoping agreement was reviewed and approved by March JPA staff prior to the preparation of the TA. The traffic study scoping agreement provided an outline of the Proposed Project's study area, trip generation, trip distribution, and analysis methodology. This agreement is included in the Proposed Project's TA (Appendix M-1). The Proposed Project's study area was expanded pursuant to comments received by March JPA staff from the City of Moreno Valley during the Notice of Preparation scoping period for the EIR. Four additional intersections were added to the TA, and a total of eight roadway segments were analyzed (Appendix M-1).

The TA provides a detailed analysis of operational characteristics for the 20 intersections and 8 roadway segments in the study area for the following scenarios: Existing (2020) Conditions, Existing plus Project, Opening Year Cumulative (2026), Opening Year Cumulative (2026) with Project, Horizon Year (2045) Conditions, Horizon Year (2045) with Project. Development of the Proposed Project is not anticipated to require the construction of any off-site improvements; however, there are improvement needs identified at off-site intersections for future traffic analysis scenarios where the Proposed Project would contribute traffic (as measured by 50 or more peak-hour trips). The Proposed Project's contributions toward off-site intersection deficiencies would be fulfilled through payment of its fair share or participation in the pre-existing fee programs that would be assigned to construction of the identified recommended improvements (see Appendix M-1, Chapter 8, Local and Regional Funding Mechanisms). For any operational deficiency noted in the TA, a fair-share calculation for the Proposed Project has been determined and included in Table 1-5 of the TA. The Proposed Project would be conditioned to payment of a fair-share contribution toward future improvements, as described in **PDF-TRA-1** (Payment of Fair-Share Cost) (refer to Section 3.12.3, Project Design Features, for full text of **PDF-TRA-1**).

Project Trip Generation (Non-CEQA Analysis)

The ITE Trip Generation Manual (10th Edition, 2017) does not currently have any trip generation rates for an air freight cargo center; as such, trip generation estimates for the Proposed Project have been developed using data collected at a similar facility with operations like those proposed. The trip generation rate is based on data collected at a similar use facility (with similar aircraft operations) based on the number of aircraft parking positions. The rates were calculated by dividing the average trips (average trips based on 3 days of data collection) by the maximum number of aircraft parking positions (which is 5 parking positions). The passenger car trips shown in Table 3.12-6 are employee trips. Because the traffic counts at the similar use facility were conducted during the COVID-19 pandemic, the observed trip generation rate is anticipated to be conservative due to the increase in online shopping (compared to pre-COVID conditions) however, no adjustments have been made to the empirical data in an effort to determine a conservative trip generation. Therefore, the trip generation estimate is conservative in nature. The detailed trip generation rate discussion is provided in the TA (Appendix M-1).

Table 3.12-6. Project Trip Generation

Proposed Project	Quantity Units	AM Peak Hour			PM Peak Hour			Daily Total Trips
		In	Out	Total	In	Out	Total	
Typical Day (Non-Peak Season, 48 Weeks) – Gateway Aviation Center								
Passenger Cars								
2-axle	7 APP	104	56	160	3	57	60	1,000
Trucks								
2-axle	N/A	1	0	1	2	2	4	28
3-axle		2	5	7	7	2	9	94
4+ axle		6	4	10	8	17	25	154
<i>Total Truck Trips</i>		9	9	18	17	21	38	276
All Vehicles								
Total Trips (Actual Vehicles)^a	7 APP	113	65	178	20	78	98	1,276
Peak Season (4 Weeks) – Gateway Aviation Center								
Passenger Cars^b								
2-axle	7 APP	153	82	235	4	84	88	1,472
Trucks								
2-axle	N/A	1	0	1	3	3	6	42
3-axle		3	7	10	10	3	13	138
4+ axle		9	6	15	12	25	37	228
<i>Total Truck Trips</i>		13	13	26	25	31	56	408
All Vehicles								
Total Trips (Actual Vehicles)^a	7 APP	166	95	262	29	115	144	1,880

Notes: APP = aircraft parking positions; N/A = not applicable.

^a Total trips = passenger cars + truck trips.

^b Non-Peak trip generation has been increased due to the increase in flights from 17 per day to 23 per day during the Peak season.

The Proposed Project's trip generation estimate (Table 3.12-6) is based on the anticipated operations for the site. Specifically, it has been assumed that the building can accommodate 7 aircraft parking positions with approximately 17 flights per day occurring during the typical Non-Peak season (6 days a week from January to late November). The Proposed Project is anticipated to generate a total of 1,276 trip-ends per day with 178 AM peak hour trips and 98 PM peak hour trips, on a typical Non-Peak season day. The Peak season, which is anticipated to only occur 4 weeks in the year (late November through late December), would increase to 22 flights per day (approximately 256 additional one-way flights over a 4-week period). The maximum annual flight operations would not exceed the currently available civilian air cargo operations capacity under the Joint Use Agreement (MIPAA and DAF 2014). Flight operations would occur between the hours of 7:00 a.m. and 11:00 p.m. (approximately 5% of the Proposed Project flight operations would occur between 10:00 p.m. and 11:00 p.m.). The Proposed Project is anticipated to generate a total of 1,880 trip-ends per day, with 262 AM peak hour trips and 144 PM peak hour trips, on a Peak season day, which includes both passenger cars (i.e., employee trips) and trucks. Both the Non-Peak and Peak seasons have been evaluated for the purposes of the LOS-based traffic study (however, the study area is based on the trip generation for the Peak season).

3.12.10 References Cited

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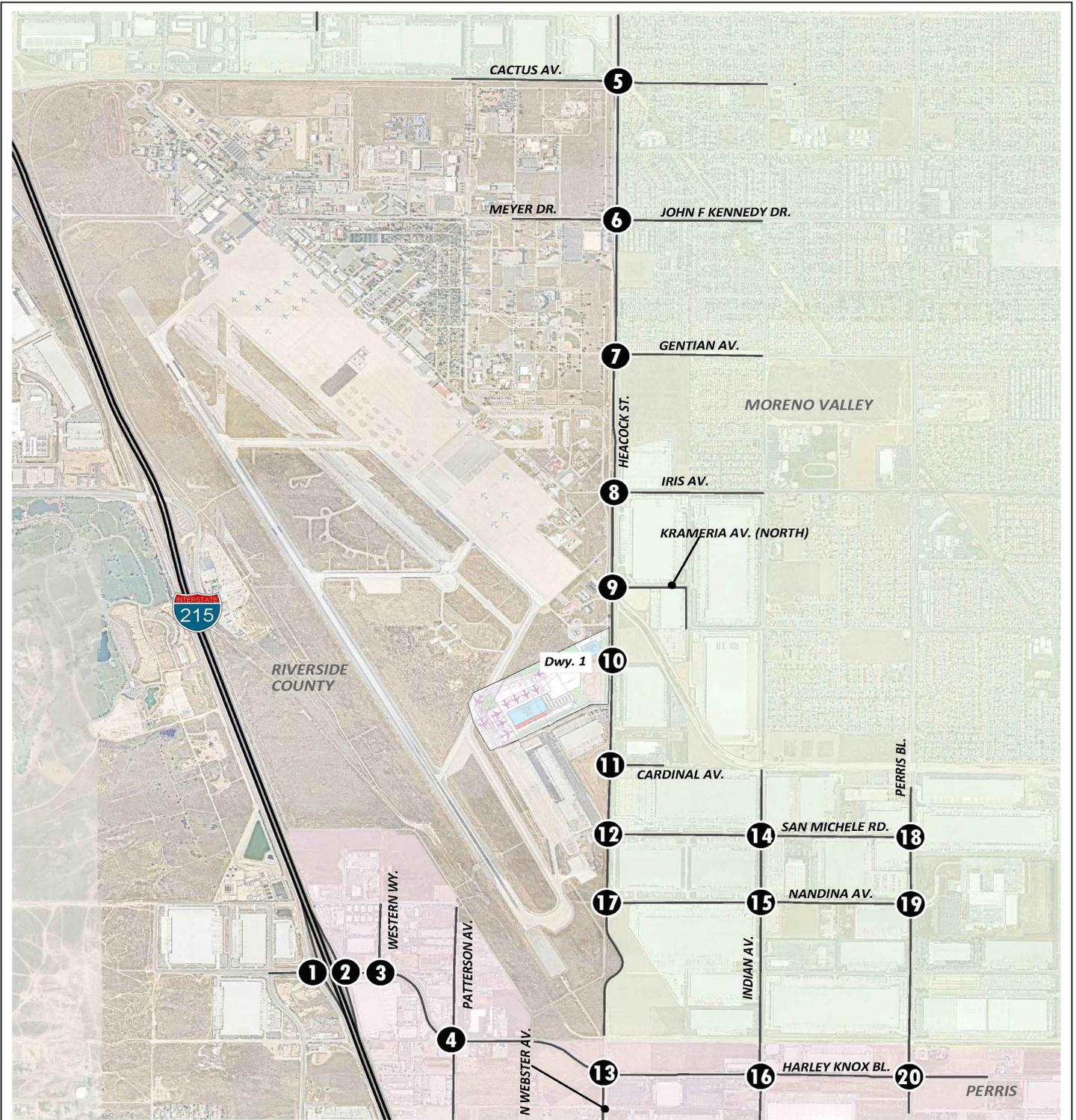
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LEGEND:

0 = EXISTING INTERSECTION ANALYSIS LOCATION



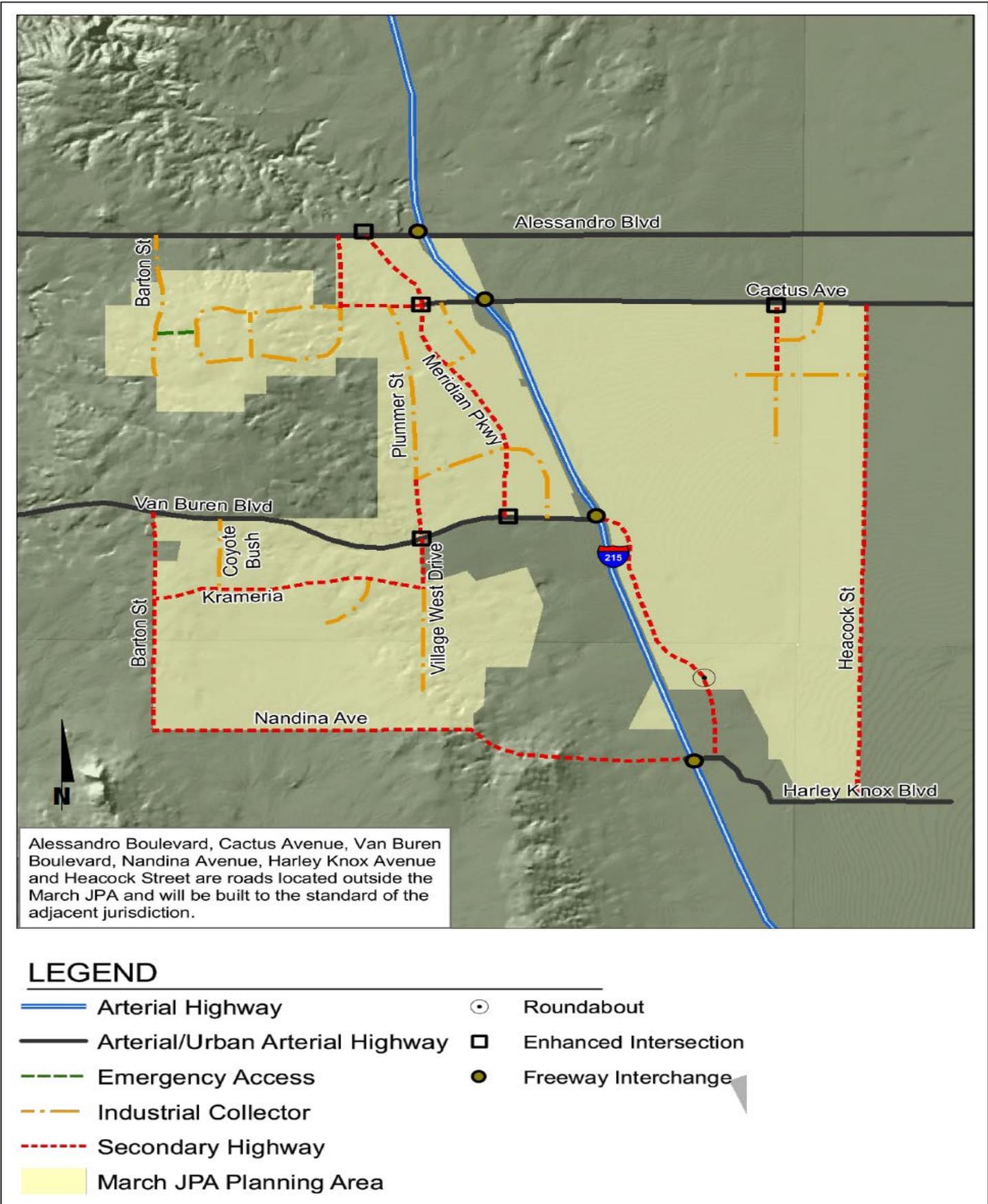
SOURCE: Urban Crossroads, 2022

FIGURE 3.12- 1

Roadway Network near the Project Site

Meridian D-1 Gateway Aviation Center Project

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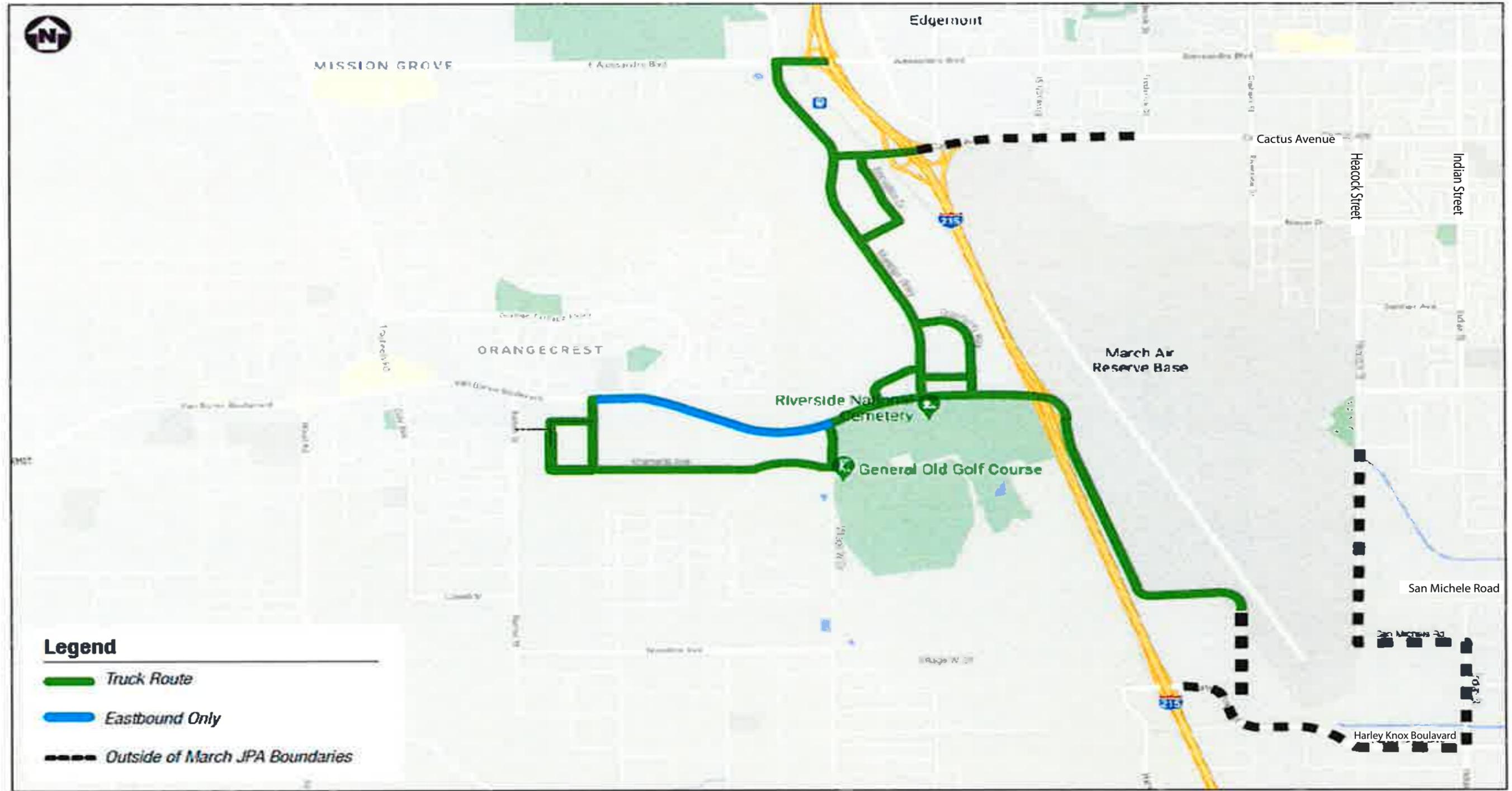
SOURCE: Urban Crossroads, 2022

FIGURE 3.12-2

March JPA General Plan Circulation Element

Meridian D-1 Gateway Aviation Center Project

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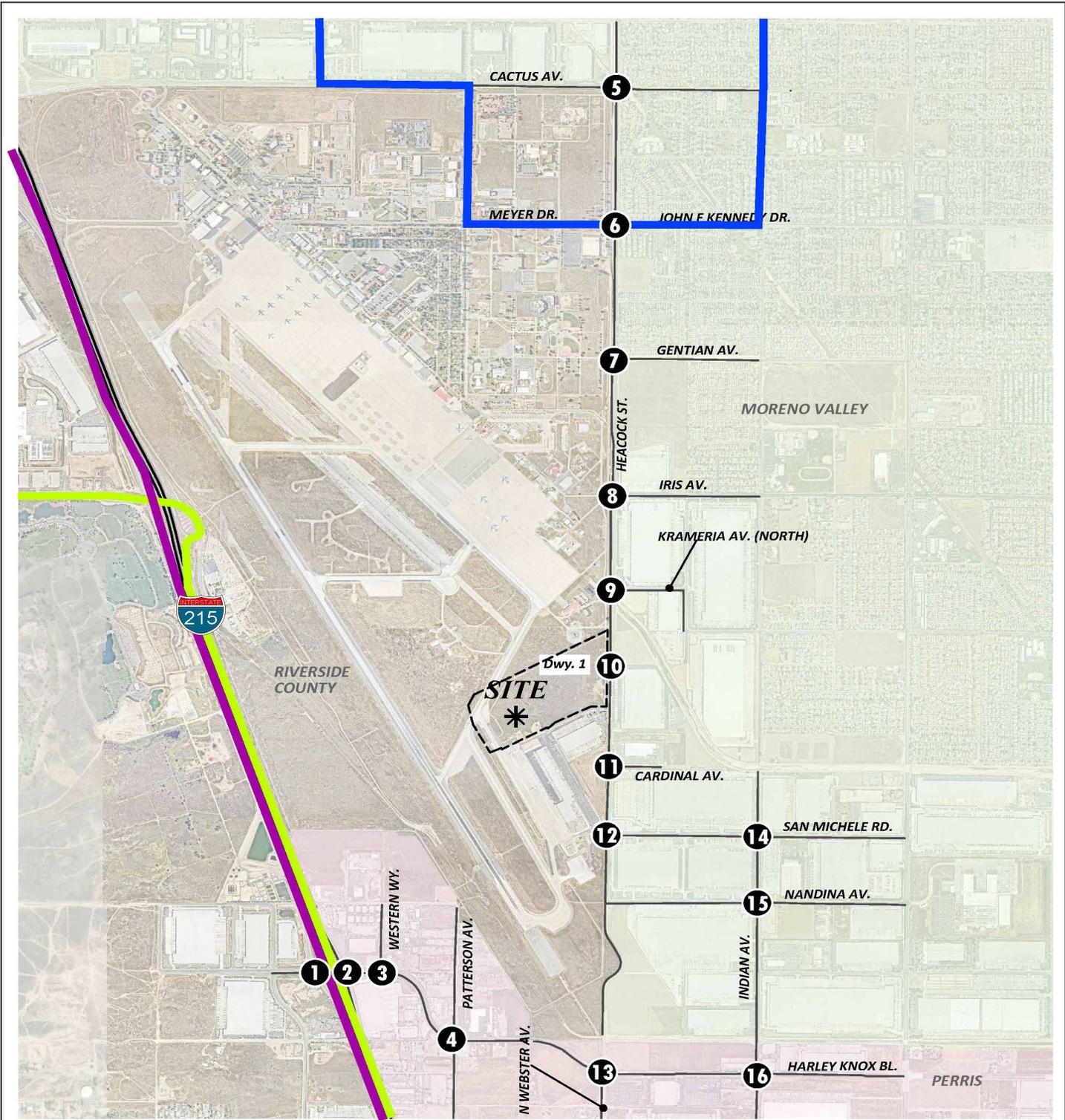


SOURCE: March Joint Powers Authority, 2022

FIGURE 3.12-3

March JPA Truck Routes
Meridian D-1 Gateway Aviation Center Project

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LEGEND:

- = RTA ROUTE 11
- = RTA ROUTE 27
- = RTA ROUTE 208



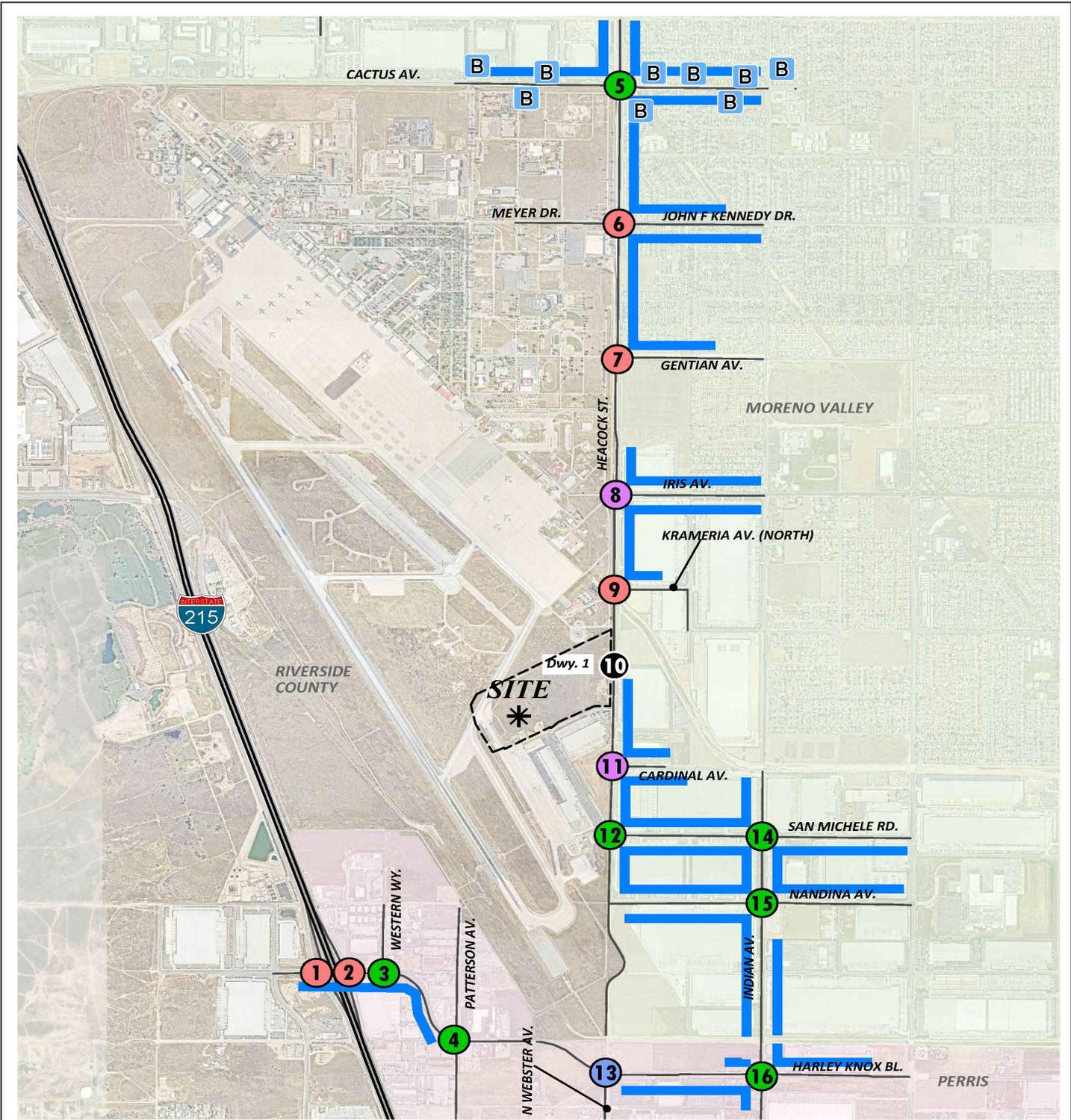
SOURCE: Urban Crossroads, 2022

FIGURE 3.12-4

Public Transit Routes

Meridian D-1 Gateway Aviation Center Project

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LEGEND:

- = SIDEWALK
- B = BUS STOP
- 0 = NO CROSSWALK
- 0 = CROSSWALK ON ALL APPROACHES
- 0 = CROSSWALK ON THREE APPROACHES
- 0 = CROSSWALK ON TWO APPROACHES
- 0 = CROSSWALK ON ONE APPROACH



SOURCE: Urban Crossroads, 2022

FIGURE 3.12-5

Existing Pedestrian Facilities

Meridian D-1 Gateway Aviation Center Project

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3.13 Tribal Cultural Resources

This section describes the existing conditions relating to tribal cultural resources (TCRs) of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, evaluates potential impacts related to the implementation of the Proposed Project, and identifies a mitigation measure to minimize these impacts. The following reference was used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Identification and Evaluation of Historic Properties: Gateway Aviation Center Project (Historic Resources Report) prepared by CRM TECH in September 2020 (Appendix E)

On July 1, 2015, Assembly Bill (AB) 52 went into effect amending the California Environmental Quality Act (CEQA) to include TCRs as a new class of resources and requiring additional considerations relating to Native American consultation. A TCR, in general, is similar to the federally defined Traditional Cultural Properties. However, AB 52 incorporates considerations of local and state significance and requires mitigation under CEQA. TCRs may include resources that are listed in or eligible for listing in the California Register of Historical Resources (CRHR), such as archaeological sites, districts, or landscapes, or other kinds of resources that the CEQA lead agency chooses to treat as TCRs through tribal consultation.

The analysis in this section of the EIR is based on the results on the tribal consultation performed by the March Joint Powers Authority (JPA) as the lead agency for the Proposed Project. Other sources consulted are listed in Section 3.13.8, References Cited.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March JPA. The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.13.1 Existing Conditions

This section describes the existing conditions of the Proposed Project's area of potential effects (APE) pertaining to TCRs, including its ethnographic setting.

Cultural Setting

Ethnographic Setting

According to current ethnohistorical scholarship, the traditional territories of several Native American groups, including the Luiseño, the Serrano, the Gabrieleño, and the Cahuilla, overlapped one another in the present-day Riverside/San Bernardino region during the Late Prehistoric Period, but the Moreno Valley area is generally

recognized as part of the traditional homeland of the Luiseño, a Takic-speaking people whose territory extended from present-day Riverside to Escondido and Oceanside, California. The name of the group derived from Mission San Luis Rey, which held jurisdiction over most of the traditional Luiseño territory during the late eighteenth and early nineteenth centuries (Appendix E; Bean and Shipek 1978).

Anthropologists have divided the Luiseño into several autonomous lineages or kin groups that represent the basic political unit among most Native Americans in Southern California. Each Luiseño lineage possessed a permanent base camp, or village, on the valley floor and another in the mountain regions for acorn collection. Luiseño villages were made up of family members and relatives, the chiefs inherited their positions, and each village owned its own land. Villages were usually located in sheltered canyons or near year-round sources of fresh water, always near subsistence resources (Appendix E; Bean and Shipek 1978).

The Luiseño exploited nearly all resources of the environment in a highly developed seasonal mobility system. Primarily hunters and gatherers, they collected seeds, roots, wild berries, acorns, wild grapes, strawberries, wild onions, and prickly pear cacti, and hunted deer, elk, antelope, rabbit, wood rats, and a variety of insects. Bows and arrows, atlatls or spear throwers, rabbit sticks, traps, nets, clubs, and slings were the main hunting tools. Each lineage had exclusive hunting and gathering rights in their procurement ranges. These boundaries were respected and only crossed with permission (Appendix E; Bean and Shipek 1978).

It is estimated that when Spanish colonization of Alta California began in 1769, the Luiseño had approximately 50 active villages with an average population of 200 individuals each (for a total population of approximately 10,000), although other estimates place the total Luiseño population at 4,000 to 5,000. Some of the villages were forcibly moved to the Spanish missions, but others were left largely intact. Ultimately, the Luiseño population declined rapidly after European contact because of diseases such as smallpox as well as harsh living conditions at the missions and, later, on the Mexican ranchos, where the native people often worked as seasonal ranch hands (Appendix E; Bean and Shipek 1978).

After the annexation of Alta California by the United States, the large number of non-native settlers further eroded the foundation of traditional Luiseño society. During the latter half of the nineteenth century, almost all remaining Luiseño villages were displaced, and their occupants eventually removed to various reservations. Today, the nearest Native American groups of Luiseño heritage live on the Soboba, Pechanga, and Pala Indian Reservations.

CHRIS Records Search

CRM TECH completed a California Historical Resources Information System (CHRIS) search at the Eastern Information Center for the APE and surrounding 1-mile radius on June 8, 2020, for the Proposed Project (Appendix E). The APE used to determine the locations within the 1-mile radius for the CHRIS records search is shown in Figure 3.4-1, Area of Potential Effects for Cultural Resources (see Section 3.4, Cultural Resources). This search included mapped prehistoric, historical, and built-environment resources, and properties designated as California Historical Landmarks, Points of Historical Interest, or Riverside County Landmarks. Additional consulted sources included the National Register of Historic Places (NRHP), the CRHR, and the California Historical Resources Inventory.

The Eastern Information Center records search for the Proposed Project indicated that 31 technical studies have been previously conducted within 1 mile of the Proposed Project's APE between the mid-1990s and 2016, which collectively cover roughly 70% of the land within the records search scope, mostly within the boundaries of March ARB. Of these 31 studies, 4 partially or entirely overlap the APE. Of these 4 studies, 3 were large-scale studies conducted on the entire area of the former March Air Force Base in preparation for its realignment in the mid-1990s.

The most recent study among these 4, which was completed in 2016, did not include the westernmost portion of the current APE. During that study, a drainage channel within the APE was recorded in the California Historical Resources Inventory and designated as Site 33-024853. As a result of the records search, 9 additional historical/archaeological sites and 1 isolate were identified within 1 mile of the APE.

The previously recorded resources are historical in age and consist of the Atchison, Topeka, and Santa Fe Railway; two flood control channels; structural remains from the World War II-era Camp Haan; and refuse deposits. Several of the sites were remains of facilities from the earlier March Air Force Base. Other than Site 33-024853, all the recorded resources were found at least 0.5 miles from the APE. Therefore, none of them required further consideration during preparation of the Historic Resources Report (Appendix E).

Native American Heritage Commission Sacred Lands File Search

All Native American coordination efforts for the Proposed Project were addressed as part of CRM TECH'S technical results included in Appendix E. CRM TECH requested a review of the Native American Heritage Commission (NAHC) Sacred Lands File on April 21, 2020. In response to CRM TECH'S inquiry, NAHC reported that the Sacred Lands File search yielded negative results for Native American cultural resources in the APE, although NAHC did note that the absence of specific information did not indicate the absence of cultural resources and recommended that local Native American groups be contacted for further information. NAHC provided a list of potential contacts in the region for that purpose.

CRM TECH contacted the eight individuals on the NAHC list on May 1, 2020, and follow-up telephone solicitations were carried out from May 15 through May 22, 2020. CRM TECH received five responses (four written; one via telephone) from the following tribal representatives: Bobby Ray Esparza, Cultural Coordinator, Cahuilla Band of Indians; Ray Chapparosa, Chairperson, Los Coyotes Band of Cahuilla and Cupeño Indians; Denisa Torres, Cultural Resources Manager, Morongo Band of Mission Indians; Molly Earp-Escobar, Cultural Planning Specialist, Pechanga Band of Luiseño Indians; John Gomez Jr., Cultural Resource Coordinator, Ramona Band of Cahuilla Indians; Cheryl Madrigal, Tribal Historic Preservation Officer, Rincon Band of Luiseño Indians; Mercedes Estrada, Tribal Administrative Assistant, Santa Rosa Band of Cahuilla Indians; and Joseph Ontiveros, Tribal Historic Preservation Officer, Soboba Band of Luiseño Indians (see Table 3.13-1). This coordination was conducted for informational purposes only and does not necessarily constitute formal government-to-government consultation as specified by AB 52. AB 52 consultation efforts conducted by March JPA are discussed in the paragraphs following the table.

Table 3.13-1. Native American Coordination

Native American Tribal Representative	Response to Initial Tribal Outreach Letters Sent May 1, 2020 (Method)
Mercedes Estrada, Tribal Administrative Assistant, Santa Rosa Band of Cahuilla Indians	No comments regarding the Proposed Project (telephone).
Denisa Torres, Cultural Resources Manager, Morongo Band of Mission Indians	The tribe noted the presence of prehistoric bedrock milling features within a 5-mile radius of the APE but did not make a specific request or recommendation (email).
Bobby Ray Esparza, Cultural Coordinator, Cahuilla Band of Indians	The tribe requested that ground-disturbing activities in the APE be monitored by a representative of the Cahuilla Band (email).

Table 3.13-1. Native American Coordination

Native American Tribal Representative	Response to Initial Tribal Outreach Letters Sent May 1, 2020 (Method)
Cheryl Madrigal, Tribal Historic Preservation Officer, Rincon Band of Luiseño Indians	The tribe stated that they had no knowledge of any cultural resources in the APE and requested to review the results of the historical/archaeological resources records search (email).
Joseph Ontiveros, Tribal Historic Preservation Officer, Soboba Band of Luiseño Indians	The tribe reported that multiple areas of potential impact were identified during an in-house database search and requested further consultation with March JPA and FAA. Furthermore, the tribe requested that ground-disturbing activities in the APE be monitored by a representative of the Soboba Band (email).
Ray Chapparosa, Chairperson, Los Coyotes Band of Cahuilla and Cupeño Indians	No response.
Molly Earp-Escobar, Cultural Planning Specialist, Pechanga Band of Luiseño Indians	No response.
John Gomez Jr., Cultural Resource Coordinator, Ramona Band of Cahuilla Indians	No response.

Notes: APE = area of potential effects; JPA = Joint Powers Authority; FAA = Federal Aviation Administration.

Assembly Bill 52 Consultation

The Proposed Project is subject to compliance with AB 52 (PRC Section 21074), which requires consideration of impacts to TCRs as part of the CEQA process, and that the lead agency notify California Native American tribal representatives who have requested notification and who are traditionally or culturally affiliated with the geographic area of a project. All NAHC-listed California Native American tribal representatives who have requested project notification pursuant to AB 52 were sent letters by March JPA on August 19, 2020 (see Table 3.13-2). The letters contained a project description, an outline of AB 52 timing, a request for consultation, and contact information for the appropriate lead agency representative. The request for tribal consultation window under AB 52 closed on September 18, 2020.

Responses providing a formal request to begin consultation were received by March JPA staff on August 28, 2020, from the Pechanga Band of Luiseño Indians; September 3, 2020, from the Rincon Band of Luiseño Indians; September 17, 2020, from the Agua Caliente Band of Cahuilla Indians; and October 6, 2020, from the Soboba Band of Luiseño Indians. A response was received by March JPA staff on August 20, 2020, from the Quechan Tribe of the Fort Yuma Reservation, stating that the tribe had no comments and would defer to the more local tribes. A response was received by March JPA staff on August 19, 2020, from the San Manuel Band of Mission Indians stating that the tribe had no concerns over the Proposed Project implementation. The tribe provided a list of mitigation measures/conditions of approval in its response and requested that the language be included as part of the Proposed Project. No other responses were received. Documents related to AB 52 consultation are on file with March JPA.

Table 3.13-2. Assembly Bill 52 NAHC-Listed Native American Contacts

Native American Tribal Representatives	Tribe
Jeff Grubbe, Chairperson	Agua Caliente Band of Cahuilla Indians
Amanda Vance, Chairperson	Augustine Band of Cahuilla Mission Indians
Doug Welmas, Chairperson	Cabazon Band of Mission Indians

Table 3.13-2. Assembly Bill 52 NAHC-Listed Native American Contacts

Native American Tribal Representatives	Tribe
Daniel Salgado, Chairperson	Cahuilla Band of Indians
Ralph Goff, Chairperson	Campo Band of Mission Indians
Robert Pinot, Chairperson	Ewiiapaayp Tribal Office
Michael Garcia, Vice Chairperson	Ewiiapaayp Tribal Office
Andrew Salas, Chairperson	Gabrieleño Band of Mission Indians-Kizh Nation
Anthony Morales, Chairperson	Gabrieleño-Tongva San Gabriel Band of Mission Indians
Sandonne Goad, Chairperson	Gabrieleño-Tongva Nation
Robert Dorame, Chairperson	Gabrieleño Tongva Indians California Tribal Council
Charles Alvarez	Gabrieleño-Tongva Tribe
Matias Belardes, Chairperson	Juaneño Band of Mission Indians Acjachemen Nation-Belardes
Javaughn Miller, Tribal	La Posta Band of Mission Indians
Gwendolyn Parada, Chairperson	La Posta Band of Mission Indians
Shane Chapparosa, Chairperson	Los Coyotes Band of Mission Indians
Angela Elliott Santos, Chairperson	Manzanita Band of Kumeyaay Nation
Michael Linton, Chairperson	Mesa Grande Band of Diegueño Mission Indians
Robert Martin, Chairperson	Morongong Band of Mission Indians
Mark Macarro, Chairperson	Pechanga Band of Luiseño Indians
Jill McCormick, Historic Preservation Officer	Quechan Tribe of the Fort Yuma Reservation
Joseph Hamilton, Chairperson	Ramona Band of Cahuilla Mission Indians
Bo Mazzetti, Chairperson	Rincon Band of Luiseño Indians
Cheryl Madrigal, Tribal Historic Preservation Officer	Rincon Band of Luiseño Indians
Jessica Mauck, Director of Cultural Resources	San Manuel Band of Mission Indians
Steven Estrada, Chairperson	Santa Rosa Band of Mission Indians
Scott Cozart, Chairperson	Soboba Band of Luiseño Indians
Cody J. Martinez, Chairperson	Sycuan Band of the Kumeyaay
Thomas Torte, Chairperson	Torres-Martinez Desert Cahuilla Indians

Note: NAHC = Native American Heritage Commission.

3.13.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal plans, policies, or ordinances related to TCRs that are relevant to the Proposed Project.

State

California State Assembly Bill 52

AB 52 was approved by Governor Jerry Brown on September 25, 2014. AB 52 amended California Public Resources Code (PRC) Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that TCRs must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. PRC Section 21074 describes a TCR

as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American tribe. A TCR is defined as follows (PRC Section 21074):

- (a) "Tribal cultural resources" are either of the following:
 - (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
 - (2) 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 Section 5024.1 In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- (b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- (c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

AB 52 formalizes the lead agency/tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with a project region, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or EIR. Section 1(b)(9) of AB 52 establishes that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds PRC Section 21080.3.2, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to TCRs, the consultation must include those topics (PRC Section 21080.3.2[a]). Any mitigation measures agreed upon in the consultation are recommended for inclusion in the environmental document and the mitigation monitoring and reporting program (where applicable) (PRC Section 21082.3[a]).

California Register of Historical Resources

In California, the term *historical resource* includes "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1[j]). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). According to PRC Section 5024.1(c), a resource may be listed as an historical resource in the CRHR if it meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are State Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Health and Safety Code Section 7050.5; California Public Resources Code Section 5097.98

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the County Coroner has examined the remains (California Health and Safety Code Section 7050.5[b]). PRC Section 5097.98 also outlines the process to be followed in the event that Native American remains are discovered. If the Coroner determines or has reason to believe the remains are those of a Native American, the Coroner must contact NAHC within 24 hours (California Health and Safety Code Section 7050.5[c]). NAHC will notify the “most likely descendant.” With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the most likely descendant by NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

PRC Section 5097.98 addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes NAHC to resolve disputes regarding the disposition of such remains. PRC Section 5097.98 has been incorporated into Section 15064.5(e) of the CEQA Guidelines. The Proposed Project would be required to comply with PRC Section 5097.98 should any unknown human remains be discovered during site disturbance.

California Public Resources Code, Sections 5097.5 and 30244

PRC Section 5097.5 prohibits “knowing and willful” removal, destruction, injury, defacement, or excavation upon any historic or prehistoric ruins, burial grounds, or archaeological or vertebrate paleontological site situated on public lands (lands under state, county, city, district, or public authority ownership or jurisdiction, or the ownership or jurisdiction of a public corporation), except where the agency with jurisdiction has granted express permission. PRC Section 30244 requires reasonable mitigation for impacts on archaeological or paleontological resources that occur as a result of development.

Local

There are no local plans, policies, or ordinances related to TCRs that are relevant to the Proposed Project.

3.13.3 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's impacts to TCRs are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and, as applicable, the March JPA CEQA Guidelines (March JPA 2022). According to the CEQA Guidelines, for the purposes of this EIR a significant impact related to TCRs would occur if the Proposed Project would:

- TCR-1** 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:
- i. 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 section 5020.1(k), or
 - ii. 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 Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

3.13.4 Impacts Analysis

Threshold TCR-1: Would the project 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 size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i. **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 section 5020.1(k)?**

Less-Than-Significant Impact. As described in Section 3.13.1, Existing Conditions, a CHRIS records search was conducted at the Eastern Information Center on June 8, 2020, for the Proposed Project's APE (Appendix E) and within a 1-mile buffer around the APE. No Native American cultural resources were identified within the Proposed Project's APE as a result of the CHRIS records search. To date, government-to-government consultation initiated by March JPA has not resulted in the identification of a TCR within or near the project site. No TCRs have been identified by California Native American tribes as part of March JPA's AB 52 notification and consultation process. Impacts would be **less than significant**.

- ii. **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 Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Less-Than-Significant Impact with Mitigation Incorporated. As discussed for Threshold TCR-1(i), no TCRs have been identified by California Native American tribes through the AB 52 consultation process, and to date, there have been no TCRs identified within the Proposed Project's APE that have been determined by March JPA to be significant pursuant to the criteria set forth in PRC Section 5024.1. However, in consideration of the known sensitivity of the project site for cultural resources, the Cahuilla Band of Indians and the Soboba Band of Luiseño Indians were contacted during the AB 52 process and the tribes requested monitoring. **Mitigation Measure (MM) CUL-1** (Archaeological and Tribal Monitoring; see Section 3.4, Cultural Resources) is included as part of the Proposed Project to provide for archaeological and tribal monitoring for all initial ground-disturbing activities, including cultural/historical sensitivity training. With implementation of **MM-CUL-1**, impacts would be **less than significant with mitigation incorporated**.

3.13.5 Mitigation Measures

The following measure, provided in full in Section 3.4.5, Mitigation Measures, of the Cultural Resources section, shall be implemented to reduce impacts to TCRs:

- **MM-CUL-1 (Archaeological and Tribal Monitoring)**

3.13.6 Level of Significance after Mitigation

With implementation of **MM-CUL-1**, which requires archaeological and tribal monitoring during all initial ground-disturbing activities, potential impacts to TCRs would be reduced to **less than significant with mitigation incorporated**.

3.13.7 Cumulative Effects

The geographical area evaluated for cumulative impacts to TCRs encompasses areas within jurisdictions in the vicinity of the project site, including March JPA; the County of Riverside; and the Cities of Perris, Moreno Valley, and Riverside. As future growth occurs within the jurisdictions in the project site vicinity, impacts to TCRs could occur due to the potential for development to disturb or impact known or unknown TCRs in the area. Cumulative impacts to TCRs would occur if the Proposed Project, in combination with related projects (as identified in Table 3-1, Cumulative Projects, in Chapter 3 of this Draft EIR), would affect TCRs. As discussed herein, the Proposed Project would not result in significant impacts to TCRs with implementation of **MM-CUL-1**; therefore, the Proposed Project would not result in or contribute to cumulative significant impacts to TCRs. Cumulative impacts would be **less than significant with mitigation incorporated**.

3.13.8 References Cited

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3.14 Utilities and Service Systems

This section discusses the existing conditions relating to utilities and service systems, including water, wastewater, stormwater drainage facilities, solid waste disposal, electricity, telecommunications, and natural gas, of the proposed Meridian D-1 Gateway Aviation Project (Proposed Project) site (project site) and vicinity, identifies associated regulatory requirements, and evaluates potential impacts related to the implementation of the Proposed Project. The following references were used in the preparation of this section of the Draft Environmental Impact Report (EIR):

- Preliminary Hydrology Study, Cargo Gateway D-1 Parcel Development, prepared by DRC Engineering in October 2020, revised in January 2022 (Appendix K-1)
- Project-Specific Water Quality Management Plan (WQMP), D-1 Parcel, prepared by DRC Engineering in October 2020, revised in January 2022 (Appendix K-2)

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within March Inland Port Airport under the jurisdiction of March Joint Powers Authority (JPA). The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (non-peak). During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

3.14.1 Existing Conditions

Water Supplies

The Western Municipal Water District (WMWD) supplies water for customers in western Riverside County and would supply water for the Proposed Project. An existing 10-inch-diameter WMWD water line crosses the project site from the northeast to the southwest, and an existing 12-inch-diameter WMWD water line runs east to west along the southern boundary of the project site. In addition, WMWD has an inter-agency interconnect located near the existing driveway to the project site that connects to an Eastern Municipal Water District (EMWD) water line. This interconnect ensures that adequate fire-service flows to the area can be maintained. These existing features are shown on Figure 2-8, Water and Sewer Infrastructure Plan.

WMWD's service area is located in western Riverside County and covers 527 square miles, of which 104 square miles is included in its retail service area. WMWD is both a wholesale and a retail agency, supplying approximately 25,000 retail customers and 14 wholesale customers within its service area. WMWD's water supplies consist primarily of purchased or imported water, the majority of which is purchased from the Metropolitan Water District of Southern California (Metropolitan), which makes up approximately 71% of WMWD's total water supply. Metropolitan imports water from the State Water Project, which conveys water from the Bay-Delta to Southern California via the California Aqueduct, and from the Colorado River through the Colorado River Aqueduct. WMWD also purchases local groundwater supplies from Meeks and Daley Water Company; Riverside Highland Water Company; and, when available, the City of Riverside, typically on an emergency or off-season basis. Groundwater is a major source of water supply for WMWD and its retail agencies, making up 29% of WMWD's total supply in 2020.

Local groundwater supplies are pumped by WMWD from the Temecula–Murrieta portion of the Temecula Valley Groundwater Basin and the San Bernardino Basin for retail supplies, and from the Arlington Subsection of the Riverside–Arlington Groundwater Basin for wholesale supplies (WMWD 2021).

Wastewater

The project site is located within the jurisdiction of WMWD, which provides wastewater service to the March JPA planning area. However, EMWD would be the wastewater service provider for the Proposed Project. EMWD provides wastewater service to areas north, east, and south of the March JPA planning area. There is an existing 8-inch-diameter EMWD sewer line located along and beneath Heacock Street. An interagency agreement between WMWD and EMWD would authorize the Proposed Project to connect to and discharge wastewater to the EMWD sewer line within Heacock Street. These existing features are shown on Figure 2-8, Water and Sewer Infrastructure Plan.

EMWD has five water reclamation facilities that treat approximately 46 million gallons of wastewater every day. Wastewater from the project site would receive treatment at the Perris Valley Regional Water Reclamation Facility, which has an existing treatment capacity of 22 million gallons per day (mgd), with typical daily flows averaging 15.5 mgd. EMWD plans to expand the capacity of the facility to 100 mgd to meet future demands in the region. The recycled wastewater produced by the facility is generally used by surrounding agricultural customers (EMWD 2021).

Stormwater Drainage

Stormwater drainage facilities serving the project site and surrounding areas are managed by the Riverside County Flood Control and Water Conservation District. The project site is located within an area subject to the Perris Valley Area Drainage Plan and Master Drainage Plan, with flows from the project site draining to the Perris Valley Channel (RFCD 2020).

The topography of the project site and vicinity is relatively flat. Site elevations range from approximately 1,490 to 1,495 feet above the North American Vertical Datum of 1988. Two earthen drainage channels enter the site from the northwest and intercept near the center of the project site prior to discharging into a dual 36-inch-diameter culvert located at the southern boundary of the project site. A concrete V-channel is located along the southern boundary of the project site that conveys flows from east to west into the same dual 36-inch-diameter culvert. These existing features are shown on Figures 2-7a and 2-7b, Stormwater Infrastructure Plan.

As described in the Preliminary Hydrology Study (Appendix K-1), the majority of flows from the project site drain to the dual 36-inch-diameter culvert located on the southern boundary of the project site; a narrow portion along the eastern boundary drains toward Heacock Street; and a portion of the southwest corner of the site drains to a grass-lined drainage swale southwest of the project site (Figures 3.9-1a and 3.9-1b, Existing Project Site Hydrology). The dual 36-inch-diameter culvert discharges to the Heacock Channel located along Heacock Street approximately 750 feet downstream of the project site, which then conveys flows to the Perris Valley Channel–Lateral B. The Perris Valley Channel–Lateral B is located approximately 1.3 miles south of the project site, where Heacock Street ends. The flows that do not enter the dual 36-inch-diameter culvert are conveyed via other local drainages to the Perris Valley Channel–Lateral B (RFCD 2020). Runoff continues to flow south through this channel until it converges with the San Jacinto River, Canyon Lake, and Lake Elsinore (Appendix K-1). A detailed description of on-site drainage conditions is provided in Section 3.9, Hydrology and Water Quality.

Solid Waste

Riverside County Department of Waste Resources (RCDWR) is responsible for the landfill disposal of non-hazardous waste. RCDWR operates five active landfills (Badlands Landfill, Blythe Landfill, Desert Center Landfill, Lamb Canyon Landfill, and Oasis Landfill), and administers a contract agreement for waste disposal at the private El Sobrante Landfill (RCDWR 2021). All active landfills currently located in Riverside County are rated as Class III landfills according to Title 27 of the California Code of Regulations (CCR). Class III landfills accept nonhazardous, municipal solid wastes, including household refuse and yard trimmings, as well as furniture, household appliances, televisions, computers, and other electronic waste. According to the Riverside County General Plan Environmental Impact Report (EIR), waste originating from anywhere within Riverside County may be accepted for disposal at any of the County of Riverside's sites (County of Riverside 2015). Table 3.14-1 summarizes the permitted daily capacity, current design capacity, remaining capacity, and estimated closure dates of the active landfills in Riverside County.

Table 3.14-1. Riverside County Active Landfills

Active Landfill	Permitted Daily Capacity (TPD)	Current Design Capacity (CY)	Remaining Capacity (CY) per Year ^a	Estimated Landfill Closure Date
Badlands	5,000	82,300,000	7,800,000 (2020)	1/1/2059
Blythe	400	6,229,670	3,834,470 (2016)	8/1/2047
Desert Center	60	409,112	127,414 (2018)	8/1/2107
El Sobrante ^b	16,054	209,910,000	143,977,170 (2018)	1/1/2051
Lamb Canyon	5,000	39,681,513	19,242,950 (2015)	4/1/2032
Oasis	400	1,097,152	433,779 (2012)	9/1/2055
Total	N/A	299,945,934	175,415,783	N/A

Source: CalRecycle 2023.

Notes: TPD = tons per day; CY = cubic yards; N/A = not applicable.

^a The reporting year for the estimated remaining capacity is noted in parentheses.

^b The Riverside County Department of Waste Resources administers a contract agreement for waste disposal at the private El Sobrante Landfill.

The Kettleman Hills Landfill, located in Kettleman City in Kings County, California, provides waste treatment, storage, and disposal operations for hazardous waste, as well as disposal for municipal solid waste. The facility is situated on a 1,600-acre property, with 555 acres currently available and permitted for waste management activities. The facility is permitted to accept most types of hazardous wastes as defined by the U.S. Environmental Protection Agency and the State of California. The facility conducts the following activities: solar evaporation in surface impoundments; disposal into hazardous waste landfills; polychlorinated biphenyl (PCB) draining and flushing; PCB disposal and storage; and stabilization, solidification, and storage of bulk and drummed waste (DTSC 2003).

Electricity, Telecommunications, and Natural Gas

Electricity is provided to unincorporated Riverside County and the project site by Southern California Edison (SCE). SCE power lines are located along Heacock Street to the east of the project site. These power lines are not located within the public right-of-way; rather, the lines are located within the boundary of the March Inland Port Airport (within March JPA jurisdiction). Telephone, cable, and internet service are provided by Verizon, Frontier, Spectrum, and other independent companies. Facilities are located aboveground and belowground within private easements. The project site would be serviced by Frontier for communication services. Southern California Gas Company provides March JPA with natural gas service. The Proposed Project would receive natural gas service by connecting to the underground natural gas line that runs north-south across the project site.

3.14.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal regulations affecting storm drain, water, sewer, solid waste service, electricity, or telecommunications for the Proposed Project.

State

The State of California has its own set of statutes and regulations governing stormwater, water, sewer, and solid waste services for the Proposed Project.

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Section 10610 et seq.) requires urban water suppliers that provide water for municipal purposes to more than 3,000 customers or supply more than 3,000 acre-feet of water annually to develop an Urban Water Management Plan (UWMP) every 5 years and submit it to the California Department of Water Resources. State and local agencies and the public frequently use UWMPs to determine if agencies are planning adequately to reliably meet water demands in various service areas. Urban water suppliers also must prepare UWMPs to be eligible for state funding and drought assistance.

A UWMP provides information on water usage, water supply sources, and water reliability planning within a specified water agency service area. It also may provide implementation schedules to meet projected demands over the planning horizon, a description of opportunities for new development of desalinated water, groundwater information (where groundwater is identified as an existing or planned water source), description of water quality over the planning horizon, and identification of water management tools that maximize local resources and minimize imported water supplies. Additionally, a UWMP evaluates the reliability of water supplies within the specified service area. This includes a water supply reliability assessment, water shortage contingency plan, and development of a plan in case of an interruption of water supplies. A discussion of the applicable UWMP for the Proposed Project is provided in the discussion of local regulations later in this section.

California Code of Regulations Title 24, Part 11

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code at 24 CCR, Part 11, is commonly referred to as CALGreen and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all new construction of residential and non-residential buildings. CALGreen standards are updated periodically. The latest version became effective on January 1, 2023.

Mandatory CALGreen standards pertaining to water, wastewater, and solid waste include the following (24 CCR, Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings
- Mandatory reduction in outdoor water use through compliance with a local water-efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance
- Diversion of 65% of construction and demolition waste from landfills

Assembly Bills 939 and 341

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) was enacted as a result of a national crisis in landfill capacity, as well as a broad acceptance of a desired approach to solid waste management of reducing, reusing, and recycling. AB 939 mandated local jurisdictions to meet waste diversion goals of 25% by 1995 and 50% by 2000, and established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. AB 939 requires cities and counties to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element to demonstrate how the jurisdiction will meet diversion goals. Other elements include encouraging resource conservation and considering the effects of waste management operations. The diversion goals and program requirements are implemented through a disposal-based reporting system by local jurisdictions, under California Integrated Waste Management Board regulatory oversight. Since the adoption of AB 939, landfill capacity is no longer considered a statewide crisis. AB 939 has achieved substantial progress in waste diversion, program implementation, solid waste planning, and protection of public health, safety, and the environment from landfill operations and solid waste facilities.

In 2011, AB 341 was passed, requiring CalRecycle to require that local agencies adopt strategies that enable 75% diversion of all solid waste by 2020. AB 341 focused on mandatory commercial recycling and requires California commercial enterprises and public entities that generate 4 or more cubic yards (CY) per week of waste, as well as multi-family housing complexes with five or more units, to arrange for recycling services. At least one of the following actions is required:

- Source separate recyclable and/or compostable material from solid waste and either self-haul, subscribe to a recycling program through a waste hauler, and/or otherwise arrange for pickup of the recyclable and/or compostable materials separately from the solid waste to divert them from disposal.
- Subscribe to a service that includes mixed waste processing alone or in combination with other programs, activities, or processes that divert recyclable and/or compostable materials from disposal and yield diversion results comparable to source separation.
- Property owners of commercial or multi-family complexes may require tenants to source separate their recyclable materials. Tenants must source separate their recyclable materials if required to by property owners of commercial or multi-family complexes.

As of 2021, the state's recycling rate was 40%, down from 42% in 2020 (CalRecycle 2022).

Local

March JPA General Plan

The Land Use Element and Resource Management Element of the March JPA General Plan include goals and policies that are relevant to the Proposed Project related to utilities and emergency services. The following goals and policies from the March JPA General Plan (March JPA 1999) apply to the Proposed Project.

Land Use Element

Goal 10: Avoid undue burdening of infrastructure, public facilities, and services requiring new development to contribute to the improvement and development of the March JPA Planning Area.

Policy 10.1: Require new construction to pay its “fair share” of the cost of providing adequate public services, infrastructure, and facilities for the development.

Policy 10.2: Require new construction to provide adequate infrastructure to serve the development (i.e., curbs and gutters, sidewalks, streetlights, water service, sewer service or septic systems, etc.) prior to initiation of use.

Policy 10.3: Locate commercial and industrial development in areas where street rights-of-way and capacity are available, as well as sufficient infrastructure and public services.

Policy 10.4: Facilitate the provision of public services (i.e., sewer, water, streets, and public safety) to be provided in an efficient and cost-effective manner.

Goal 12: Ensure, plan, and provide adequate infrastructure for all facility reuse and new development, including but not limited to, integrated infrastructure planning, financing, and implementation.

Policy 12.1: Coordinate the provision of all public utilities and services to ensure a consistent, complete and efficient system of service to development.

Policy 12.2: Require new construction to pay its “fair share” for the regional infrastructure system by providing appropriate dedications, improvements, and/or fee assessment districts or other financing mechanisms.

Policy 12.3: Require new development projects to provide for the extension of infrastructure to serve the development, including over-sizing facilities for future needs.

Goal 13: Secure adequate water supply system capable of meeting normal and emergency demands for existing and future land uses.

Policy 13.1: Only approve development which can demonstrate an adequate and secure water supply for the proposed use.

Policy 13.3: Design and operate March JPA facilities in compliance with established water conservation practices and programs.

Goal 14: Establish, extend, maintain, and finance a safe and efficient wastewater collection, treatment, and disposal system which maximizes treatment and water recharges, minimizes water use, and prevents groundwater contamination.

Policy 14.1: Require all development to adequately collect, treat, and dispose of wastewater in accordance with the Santa Ana Regional Water Quality Control Board requirements.

Policy 14.2: Require connection to the sewer system for any development occurring on land formerly part of March AFB.

Goal 15: In compliance with state law, ensure solid waste collection, siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal programs and education are consistent with the County Solid Waste Management Plan.

Policy 15.1: Ensure all hazardous materials are stored, treated, and disposed in accordance with state and federal law.

Policy 15.2: Support programs to promote greater awareness and involvement in waste reduction and recycling.

Goal 16: Adequate supplies of natural gas and electricity from utility purveyors and the availability of communication services shall be provided within the March JPA Planning Area.

Policy 16.1: Where feasible, require new development to underground on-site telecommunication connections.

Goal 17: Adequate flood control facilities shall be provided prior to, or concurrent with, development in order to protect the lives and property within the March JPA Planning Area.

Policy 17.1: Provide for the adequate drainage of storm runoff to protect the lives and property within the Planning Area.

Policy 17.3: Require new development to construct new or upgrade existing drainage facilities to accommodate the additional storm runoff caused by the development.

Policy 17.4: Require all storm drain and flood control facilities to be approved and operational prior to the issuance of certificates of occupancy for the associated development.

Resource Management Element

Goal 1: Conserve and protect surface water, groundwater, and imported water resources.

Policy 1.1: Where possible, retain local drainage courses, channels and creeks in their natural condition.

Policy 1.2: Protect groundwater and surface water resources from depletion and sources of pollution.

Policy 1.4: Require development to conserve water resources, including the use of water-efficient plumbing fixtures and irrigation systems.

Policy 1.5: Conserve imported water by requiring water conservation techniques, water-conserving and recycling processes, drought-resistant landscaping, and reclaimed water for irrigation, when available and appropriate.

Policy 1.6: Promote the use of drought tolerant landscaping in development, and encourage the use of reclaimed water for irrigation in parks, golf courses, and industrial uses, as well as for other urban uses whenever feasible and where legally prohibited.

March JPA Ordinance No. JPA 09-08.250

March JPA's Water Efficient Landscape Regulations implement the JPA's General Plan policies for water conservation, including Policies 1.4 and 1.5 of the General Plan Resource Management Element, which promote the use of efficient irrigation systems, reclaimed irrigation water, and low- and moderate-water-use plants. Water-efficient landscape regulations pursuant to this ordinance include the following (March JPA 2016):

1. Irrigation systems shall be designed, maintained, and managed to meet or exceed an average irrigation efficiency of 0.71.
2. All irrigation systems shall be designed to prevent runoff, over-spray, low head drainage, and other similar conditions where water flows off site on to adjacent property, non-irrigated areas, walk, roadways, or structures. Irrigation systems shall be designed, constructed, installed, managed, and maintained to achieve as high an overall efficiency as possible.
3. Landscaped areas shall be provided with a smart irrigation controller which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions unless the use of the property would otherwise prohibit use of a timer.

RCDWR Design Guidelines

The RCDWR Design Guidelines for Refuse and Recyclables Collection and Loading Areas are intended to assist project proponents in identifying space and other design considerations for refuse/recyclables collection and loading areas per the mandatory commercial recycling requirements of AB 341, and per the California Solid Waste Reuse and Recycling Access Act of 1991 (RCDWR 2019). The guidelines also assist the County of Riverside in meeting and maintaining the waste reduction goals mandated by AB 939. The RCDWR Design Guidelines require one 4 CY refuse bin, one 4 CY recyclables bin, and one 4 CY organics bin per each 20,000 square feet of office, general commercial, or industrial space. Compliance with the RCDWR Design Guidelines is necessary for obtaining an RCDWR clearance for issuance of a building permit. As part of the March JPA building permit review process, a site plan that indicates the location and capacity of solid waste and recycling collection and loading areas must be submitted to RCDWR for review and approval prior to building permit issuance (RCDWR 2019).

RCDWR Construction and Demolition Recycling Requirements

As part of the March JPA building permit review process, RCDWR requires that projects that have the potential to generate construction and demolition waste complete a waste recycling plan prior to issuance of a building permit that identifies the estimated quantity and location of recycling of construction and demolition waste from the project (RCDWR 2020). A waste recycling report is then required upon completion of the project that demonstrates that the project recycled a minimum of 50% of its construction and demolition waste (RCDWR 2020).

MARB Water Master Plan/North and South Added Facilities Charge Water Master Plan

The MARB (March Air Reserve Base) Water Master Plan (WMWD 2014a) is a planning document intended to guide the development of water infrastructure within March ARB and for the March JPA planning area. The MARB Water Master Plan estimates water demand based on planned uses; determines pumping, storage, and pipeline requirements; evaluates emergency/redundant facility needs; prepares cost estimates for the facilities proposed; and calculates connection fee estimates on a per-acre basis. The analysis in the MARB Water Master Plan is incorporated into the North and South Added Facilities Charge Water Master Plan (WMWD 2014b), which identifies

the charges required to fund necessary improvements to water facilities based on the planned future development of the WMWD service area.

Urban Water Management Plans

Metropolitan Water District 2020 Urban Water Management Plan

Metropolitan's 2020 Regional UWMP evaluates projected near-, intermediate-, and long-term water supply availability and reliability using past hydrology data. Metropolitan has supplies that are sufficient to meet expected demands for its member agencies through 2045 under single-dry-year and multiple-dry-year conditions. Additionally, Metropolitan has plans for supply implementation and continued development of a diversified resource portfolio, including the Colorado River and State Water Project supplies, Central Valley transfers, local resource projects, and in-region storage that enables Metropolitan to meet the water supply needs of its member agencies, including WMWD and EMWD (Metropolitan 2021).

Western Municipal Water District 2020 Urban Water Management Plan Update

The WMWD 2020 UWMP is the most recently available UWMP developed for the WMWD service area. The WMWD 2020 UWMP was completed in accordance with the California Urban Water Management Planning Act and includes a description of the existing water infrastructure's current and projected water use, conservation targets, a summary of available water supplies, a water supply reliability assessment, and a water shortage contingency plan. The WMWD 2020 UWMP indicates that WMWD has supplies that are sufficient to meet expected demands for its service area through 2045 under single-dry-year and multiple-dry-year conditions (WMWD 2021).

Eastern Municipal Water District 2020 Urban Water Management Plan

The EMWD 2020 UWMP is the most recently available UWMP developed for the EMWD service area. The EMWD 2020 UWMP was completed in accordance with the California Urban Water Management Planning Act and includes a description of water demands and supplies under normal-, single-dry-, and multiple-dry-year conditions; assesses supply reliability; and describes methods of reducing demands under potential water shortages. The EMWD 2020 UWMP indicates that EMWD has ability to meet current and projected water demands through 2045 under normal-, historical single-dry, and historical multiple-dry-year conditions using a combination of imported water from Metropolitan and existing local supply resources (EMWD 2021).

Ordinance No. JPA 15-01

Ordinance No. JPA 15-01 was adopted in 2015 by the March JPA. This ordinance establishes the development impact fees that the March JPA will charge developers in order to ensure construction or acquisition of needed public facilities and capital improvements to support projected future development in Riverside County. Public facilities and improvements supported by the development impact fees include criminal justice public facilities, library construction, fire protection facilities, traffic improvement facilities, traffic signals, regional parks, regional trails, flood controls, and other facilities. These fees are necessary to require that all new development bears its fair-share cost of providing the facilities reasonably needed to effectively implement the March JPA General Plan; manage new residential, commercial, and industrial development; and address impacts caused by such development (March JPA 2015).

3.14.3 Thresholds of Significance

The significance criteria used to evaluate the Proposed Project's impacts related to utilities and service systems are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and, as applicable, the March JPA CEQA Guidelines (March JPA 2022). For the purposes of the analysis in this EIR, a significant impact related to utilities and service systems would occur if the Proposed Project would:

- UTL-1** Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- UTL-2** Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
- UTL-3** Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- UTL-4** Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- UTL-5** Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.14.4 Impacts Analysis

Threshold UTL-1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less-Than-Significant Impact.

Water Facilities

The Proposed Project would involve development of new water infrastructure, including development of three new water lines across the project site. As shown on Figure 2-8, the Proposed Project would connect to WMWD's existing 12-inch-diameter PVC water line that extends west from Heacock Street beneath the existing access roadway to the project site.¹ Two 12-inch-diameter water lines would be added for emergency fire suppression purposes. The existing 12-inch-diameter line would be capable of supplying the proposed cargo building with a 27.9-gallon-per-minute (gpm) flow, and the second 12-inch-diameter line

¹ The existing 12-inch-diameter WMWD water line located along the southern boundary of the project site has an interagency interconnect at the southeast corner of the project site with a 20-inch-diameter EMWD water line located along Heacock Street. This interconnect would be used only in the event of a fire emergency to ensure that adequate fire service flows to the project site and its vicinity can be maintained. See Appendix N-1, EMWD/WMWD Interagency Agreement for Intertie to Serve March ARB, and Appendix N-2, MARB Water Master Plan (page 7-2), for documentation of the interagency interconnect.

would be capable of supplying the emergency fire suppression system with a 4,000 gpm flow. Each of these water lines would be adequate to support the Proposed Project (DRC Engineering, pers. comm., 2023a).

Water services to be installed would include domestic water, irrigation water, and fire-water service connections and pipelines. Irrigation and domestic water would be separately metered at a location on the southeastern corner of the Air Cargo Center Component. Fire hydrants would be installed throughout the Air Cargo Center Component in accordance with Riverside County Fire Department standards. This would include development of 12 fire hydrants around the proposed cargo building. Some water lines located on the project site, including two existing 10-inch-diameter water lines that currently extend through the footprint of the proposed cargo building, would be abandoned in place. These water lines and others do not serve any areas of off-site development. Installation of water service connections, pipelines, joints, utility boxes/vaults, and meters would involve trenching beneath existing and proposed roadways, as well as on-site access and parking areas. Service lines would extend into the proposed cargo building for sanitary, maintenance, and operational needs.

Trenching and water utility work would not occur in any areas outside the on-site Air Cargo Center Component boundary, on-site access roadway and intersection improvements, or Off-Site Component boundary shown in Figure 2-10, Off-Site Component Development Plan. Because earthwork associated with water facilities would remain within the areas that have already been addressed under each environmental issue area in this EIR, development of the Proposed Project would not require relocation or construction of new or expanded water facilities that would cause a significant impact beyond those that have already been addressed. Therefore, impacts would be **less than significant**.

Wastewater Facilities

The Proposed Project would involve development of new wastewater infrastructure on the project site. As shown on Figure 2-8, the Proposed Project would connect to WMWD's existing sewer line that extends along Heacock Street. An 8-inch-diameter sewer line would be installed beneath the existing access roadway to the site and would extend to the southeastern corner of the proposed cargo building to the building's point of connection. An additional sewer line would extend to an aircraft service truck dump station (see Sheet 5 of Appendix N-3, Conceptual Site Plans).

The portion of the proposed sewer line that is within the proposed WMWD sewer easement would be maintained by WMWD, and the remainder of the line would be maintained by the site tenant. Installation of sewer service connections, pipelines, joints, utility boxes/vaults, and meters would involve trenching beneath existing and proposed roadways, as well as on-site access and parking areas. Trenching and wastewater utility work would not occur in any areas outside the Air Cargo Center Component boundary or the on-site access roadway and intersection improvements areas shown on Figure 2-10. Because earthwork associated with sewer facilities would remain within the areas that have already been addressed under each environmental issue area in this EIR, the Proposed Project would not require the construction of new or expanded wastewater facilities that would cause a significant impact beyond those that have already been addressed.

Although wastewater generated from the Proposed Project would occur within the WMWD service area, and WMWD would be the designated wastewater service provider for the project site, an interagency agreement between WMWD and EMWD would be developed to allow the Proposed Project's sewer lines to connect to EMWD's 8-inch-diameter sewer line within Heacock Street. Ultimately, wastewater generated by the

Proposed Project would be treated at EMWD's Perris Valley Regional Water Reclamation Facility. Upon buildout of the Proposed Project, because wastewater flows would ultimately be directed into EMWD wastewater facilities, the Proposed Project would add demand for wastewater services within the service area of EMWD, rather than WMWD. Thus, this analysis focuses on whether the existing EMWD wastewater facilities have adequate capacity to handle the wastewater generated by the Proposed Project.

The Proposed Project would generate wastewater flows from employee use of sanitary facilities inside the building. It is anticipated that 150 permanent employees would work at the site in two shifts. Water from the portable wash rack inside the proposed cargo building would be routed through a grease removal/trap system inside the building before being discharged to the sanitary sewer. In addition, cargo aircraft would discharge wastewater into an aircraft service truck, which in turn would discharge into a proposed dump station on the tarmac. As described above, the Proposed Project's wastewater flows would be treated at the Perris Valley Regional Water Reclamation Facility, which has an existing treatment capacity of 22 mgd, with typical daily flows averaging 15.5 mgd. EMWD plans to expand the capacity of the facility to 100 mgd to meet future demand in the region (EMWD 2021).

The wastewater generated by the 150 employees and the wash rack would be discharged to the proposed 8-inch-diameter wastewater lines at a 0.5% slope, which can accommodate up to approximately 144 gpm, or approximately 210,000 gallons per day. The Proposed Project is anticipated to generate 103,151 gallons of wastewater per day at peak use (Appendix B, Air Quality Report). In addition, each cargo jet has one bathroom with a 75-gallon tank, which is not emptied at every stop. As indicated in Section 2.4.2, Project Operations, the Proposed Project is anticipated to average 17 two-way flights per day (34 operations per day). Assuming 25% of those flights discharge a full 75-gallon tank each day, an additional 637 gallons of wastewater would be discharged into the proposed dump station each day, which would feed into a proposed 8-inch sewer line. Combining the peak employee related wastewater discharge and the aircraft discharge, the Proposed Project is anticipated to generate 103,788 gallons per day at peak use.

Based on a treatment capacity of 22 mgd and typical daily flows averaging 15.5 mgd, the facility would have sufficient capacity to accommodate the Proposed Project's wastewater flows. Therefore, the Proposed Project would not require the construction of new or expanded wastewater facilities, and **no impacts** associated with the relocation or construction of new or expanded wastewater infrastructure would occur.

Stormwater Drainage Facilities

The Proposed Project would involve development of stormwater management facilities on the project site. The preliminary design of these facilities is presented in the Preliminary Hydrology Study (Appendix K-1) and Project-Specific WQMP (Appendix K-2).

As detailed in the Hydrology Study, the overall drainage strategy is twofold: (1) to route off-site flows from Drainage Areas A and B described in Table 3.9-1, Existing Project Site Drainage Areas, and shown on Figure 3.9-1b (Existing Project Site Hydrology) around the Air Cargo Center Component and (2) to capture and treat on-site flows from on-site drainage areas in a manner that mimics predevelopment runoff patterns and volumes. Off-site flows would be routed around the site using a siphon structure and duplex storm drain lift station and would rejoin the existing dual 36-inch-diameter culvert located south of the project site (shown on Figure 3.9-2, Proposed Project Site Hydrology). On-site flows in the developed condition would be captured by storm drain inlets located throughout the project site and conveyed via reinforced

concrete pipes (RCP) and high-density polyethylene (HDPE) pipes to two underground detention systems located on the northeastern and southeastern sides of the proposed cargo building (shown on Figure 3.9-2). These underground detention systems have been sized and designed to eliminate the increase in 100-year runoff volumes and peak flow rates that would be caused by the increase in impervious surface coverage in the developed condition, and in accordance with the Riverside County Hydrology Manual (Appendix K-1; RFCD 1978). These underground detention systems (referred to as Detention Basins A and B) would also feature modular wetland biofiltration systems to treat stormwater runoff and address stormwater quality (discussed in Section 3.9 under Threshold HYD-1).

One area that would not drain to either one of the two proposed underground detention systems is the proposed aircraft apron west of the cargo building, identified as Drainage Area F on Figure 3.9-2 (and described in Table 3.9-2). Under existing conditions, stormwater from Drainage Area F drains toward Drainage Area D and ultimately to the dual 36-inch-diameter culvert at the southern boundary of the project site. However, as described in Table 3.9-2, development of the Proposed Project would increase impervious surfaces within Drainage Area F by approximately 4.6 acres and would alter drainage flows in this area such that runoff would sheet flow toward the grass-lined drainage swale to the southwest, as shown on Figure 3.9-2. However, correspondence with March Inland Port Airport Authority staff indicates that the grass-lined swale can handle the increase in flow from Drainage Area F without any appreciable drainage concerns (Appendix K-1). Furthermore, the drainage swale itself is vegetated (self-treating) and thus able to accept increased flow rates/volumes without resulting in erosion/siltation and without requiring any downstream pipe upgrades. Therefore, the potential for increased runoff from Drainage Area F to result in exceedance of off-site stormwater system capacity is minimal.

Consequently, the Proposed Project would not increase the runoff rate and volume to the existing dual 36-inch-diameter culvert or require any improvement to the grass-lined drainage swale to the southwest of the project site (or any off-site stormwater infrastructure downstream of the swale). Furthermore, trenching and stormwater utility work would not occur in any areas outside the Air Cargo Center Component boundary, on-site access roadway and intersection improvements, or Off-Site Component boundary shown on Figure 2-10. Because earthwork associated with stormwater facilities would remain within the areas that have already been addressed under each environmental issue area in this EIR, development of the Proposed Project would not require relocation or construction of new or expanded stormwater facilities that would cause a significant impact beyond those that have already been addressed.

For these reasons, the Proposed Project would not generate increased stormwater runoff from the project site sufficient to require the development of new or expanded stormwater drainage facilities, and **no impacts** associated with the relocation or construction of new or expanded stormwater infrastructure would occur.

Electricity, Telecommunications, and Natural Gas

The Proposed Project would connect to existing electricity, telecommunications services, and natural gas service lines as described in Section 3.14.1, Existing Conditions. No specific facilities upgrades are anticipated to be needed to provide service to the Proposed Project. Trenching and other construction work associated with electric, gas, and telecommunications facilities would not occur in any areas outside the on-site Air Cargo Center Component boundary or on-site access roadway and intersection improvements areas shown in Figure 2-10. Because earthwork associated with electricity, telecommunications, and natural gas facilities would remain within the areas that have already been addressed under each environmental issue area in this EIR, development of the Proposed Project would not require relocation or

construction of new or expanded electric power, natural gas, or telecommunications facilities that would cause a significant impact beyond those that have already been addressed. Therefore, impacts would be **less than significant**.

Threshold UTL-2: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less-Than-Significant Impact. Upon implementation, the Proposed Project would add a daily water demand of 27.9 gpm, which is equivalent to 45 acre-feet per year (DRC Engineering, pers. comm., 2023b). Water for the Proposed Project would be provided by WMWD. Water demand from the Proposed Project would consist of water for potable water supplies for use at sanitary facilities by employees and visitors to the site, water used for cleaning ground support and maintenance equipment via a portable wash rack located inside of the proposed cargo building, and water used as needed for activities such as cleaning the inside of facilities. Airplane washing would not occur on the project site. The water demand of the Proposed Project is expected to be typical of aviation support uses, for which the site is designated under the March JPA General Plan. In addition, WMWD would provide water supplies sufficient for a 4,000 gpm, 4-hour fire flow requirement (DRC Engineering, pers. comm., 2023b).

The Proposed Project would be required to comply with all applicable water conservation measures, including the requirements of CALGreen and March JPA's Water Efficient Landscape Ordinance. March ARB and March JPA are retail customers of WMWD, and the water demand of the Proposed Project would be served by an existing WMWD service line. Thus, the water demand of the Proposed Project would be served by WMWD, which is responsible for ensuring it has adequate water supply to serve the current and expected future water demands within its service area.

The water supply needs of the Proposed Project have been incorporated into the water supply planning evaluations of the WMWD and Metropolitan 2020 UWMPs (WMWD 2021; Metropolitan 2021). To calculate water use, WMWD used several demand projection methodologies based on Southern California Association of Governments and Department of Finance projections, recent buildout studies, and ongoing master planning efforts (including the MARB Water Master Plan and North and South Added Facilities Charge Water Master Plan). The buildout studies included a parcel-land-use-based approach to determine the future buildout demand. As illustrated in Figure 2, MARB Water Master Plan Land Use, of the MARB Water Master Plan (refer to Appendix N-2 of this EIR), the project site has been designated as Global Port/MJPA, which is consistent with the Proposed Project. Because the water demand of the Proposed Project would be characteristic of the land use type for which it is designated under the March JPA General Plan and the MARB Water Master Plan, the water supply needs of the Proposed Project are incorporated into the water supply planning evaluations of the WMWD and Metropolitan 2020 UWMPs. Both the WMWD UWMP and the Metropolitan UWMP indicate that sufficient water supplies are available to meet expected demand for customers and member agencies from 2020 through 2045 under normal, single-dry-year, and multiple-dry-year conditions (WMWD 2021; Metropolitan 2021). In addition, WMWD has provided a will-serve letter clarifying that WMWD has sufficient capacity to supply water for the Proposed Project (Appendix N-4, WMWD Water Supply Will-Serve Letter). As a result, the Proposed Project would have sufficient water supplies available to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be **less than significant**.

Threshold UTL-3: Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less-Than-Significant Impact. As described in detail under Threshold UTL-1, upon implementation, the Proposed Project would add demand for wastewater services within the EMWD service area. The Proposed Project's estimated wastewater generation is based on wastewater generation factors in the WMWD Sewer Master Plan (WMWD 2014c), which includes a wastewater generation rate of 1,700 gallons per day/acre for commercial properties. As a result, wastewater generation for the 34-acre site would be 57,800 gallons per day. The Proposed Project's wastewater flows would be treated at the Perris Valley Regional Water Reclamation Facility, which has an existing treatment capacity of 22 mgd, with typical daily flows averaging 15.5 mgd. EMWD plans to expand the capacity of the facility to 100 mgd to meet future demands in the region. As a result, the Perris Valley Regional Water Reclamation Facility would have sufficient capacity to accommodate the Proposed Project's wastewater flows (EMWD 2021). Therefore, impacts would be **less than significant**.

Threshold UTL-4: Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less-Than-Significant Impact. The Proposed Project would not result in an increase in demand for solid waste collection and disposal in excess of the capacity of available facilities during construction and operations. Solid waste generated by the Proposed Project would need to be disposed of using one or more of the regional landfills (shown in Table 3.14-1), but the permitted capacities of the landfills where the Proposed Project's waste would be taken are currently sufficient to handle the waste that would be generated by the Proposed Project (CalRecycle 2023). The Proposed Project would generate approximately 143 tons (approximately 530 cubic yards) per year of solid waste, whereas the total remaining capacity for the six active landfills in Riverside County is approximately 175 million cubic yards (CalRecycle 2023).

During construction and operation, the Proposed Project would comply with all state and local statutes and regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act. There are no federal regulations or statutes related to solid waste that apply to the Proposed Project. RCDWR would require the completion of a Waste Recycling Plan, to be submitted to RCDWR for approval prior to issuance of building permits for the site. The Waste Recycling Plan would identify and estimate the non-hazardous materials to be recycled during construction and demolition activities and would specify where and how the recyclable materials would be stored on the project site. A waste recycling report that demonstrates that the Proposed Project recycled a minimum of 50% of its construction and demolition waste must then be submitted to and approved by RCDWR prior to issuance of occupancy permits. The minor amount of waste generated in comparison to available landfill capacities, combined with compliance with state and local statutes and regulations related to solid waste, would ensure that construction and operation of the Proposed Project would have a **less-than-significant** impact with respect to solid waste.

Threshold UTL-5: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. As described in detail in Threshold UTL-4, the Proposed Project would comply with all state and local statutes and regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act. Therefore, **no impact** would occur.

3.14.5 Mitigation Measures

No mitigation is required because no significant impacts would occur.

3.14.6 Level of Significance after Mitigation

No mitigation is required because all impacts would be less than significant.

3.14.7 Cumulative Effects

Water Facilities and Water Supply

Water service to the Proposed Project would be provided by WMWD. As such, the geographic context for this cumulative analysis is projects that would also use water provided by WMWD. The WMWD 2020 UWMP includes a description of the existing water infrastructure, current and projected water use, and conservation targets; a summary of available water supplies; a water supply reliability assessment; and a water shortage contingency plan. The 2020 UWMP indicates that WMWD has sufficient supplies to meet expected demand for its customers and member agencies through 2045 under single-dry-year and multiple-dry-year conditions. The projections of the 2020 UWMP consider land use, water development programs and projects, and water conservation (WMWD 2021). The Proposed Project is consistent with the current March JPA General Plan land use designation of Aviation (AV). To the extent that cumulative projects are generally consistent with regional growth patterns and projections, the cumulative projects would not be expected to result in increased water usage causing the need for new entitlements, resources, and/or treatment facilities that are not already being planned to accommodate regional growth forecasts.

Furthermore, compliance with CALGreen would be required for the Proposed Project and cumulative projects. In addition, CALGreen standards require a mandatory reduction in outdoor water use, in accordance with the California Department of Water Resources' Model Water Efficient Landscape Ordinance. This would ensure that many of the related projects and the Proposed Project do not result in wasteful or inefficient use of limited water resources, and may, in fact, result in an overall decrease in water use per person.

Therefore, because WMWD manages its water supplies in a manner that accounts for future regional growth forecasts, and because new development and redevelopment projects are required to comply with the water conservation requirements of CALGreen, implementation of the Proposed Project, in addition to the related projects identified in Table 3-1, Cumulative Projects, in Chapter 3, would not result in cumulatively considerable impacts related to water facilities or water supply. Cumulative impacts would therefore be **less than significant**.

Stormwater Drainage Facilities

The geographic context for the analysis of cumulative impacts related to storm drainage is the Perris Valley Channel subwatershed. Cumulative development within the subwatershed will increase the number of impervious surfaces that could cause or contribute to storm drain and receiving water capacity exceedances, alter existing earthen channel profiles (i.e., create erosive downcutting and bank failure), and/or require the construction of new or expanded flood control infrastructure. However, new development within the Perris Valley Channel subwatershed would be subject to the environmental review process and compliance with local stormwater regulations, such as the Construction General Permit, the Section 404 permit process of the CWA, local municipal code requirements, and local WQMP requirements. Therefore, compliance with existing regulatory requirements would ensure that impacts associated with changes in runoff in the watersheds would be minimized. Implementation of the Proposed Project, in addition to the identified related projects identified in Table 3-1, would not result in cumulatively considerable impacts related to stormwater drainage facilities. Cumulative impacts would therefore be **less than significant**.

Wastewater Facilities

The geographic scope for potential cumulative wastewater consists of the areas that convey wastewater to the Perris Valley Regional Water Reclamation Facility. The Proposed Project and cumulative projects within the Perris Valley Regional Water Reclamation Facility service area would incrementally increase the amount of wastewater that is being conveyed to the facility. The Perris Valley Regional Water Reclamation Facility has an existing treatment capacity of 22 mgd, with typical daily flows averaging 15.5 mgd. EMWD plans to expand the capacity of the facility to 100 mgd to meet future demand in the region (EMWD 2021). Therefore, there would be no potential for development of the Proposed Project and cumulative projects to require the relocation or construction of new or expanded wastewater treatment facilities, or to result in a determination by EMWD that the Perris Valley Regional Water Reclamation Facility does not have adequate capacity to serve the projected demand. Therefore, implementation of the Proposed Project, in addition to the related projects identified in Table 3-1, would not result in cumulatively considerable impacts related to wastewater facilities. Cumulative impacts would therefore be **less than significant**.

Solid Waste

Development of the Proposed Project in combination with cumulative projects would increase land-use intensities in the area, resulting in increased solid waste generation in the service areas for the Badlands, Blythe, Desert Center, El Sobrante, Lamb Canyon, and Oasis Landfills. However, as shown in Table 3.14-1, the landfills have a combined remaining capacity of approximately 175,000,000 cubic yards and are anticipated to remain open until between 2032 and 2107. The Proposed Project and cumulative projects would be required to comply with all applicable waste reduction and recycling requirements, which include the development and implementation of a Construction Waste Recycling Plan and the inclusion of adequate refuse and recyclables collection and loading areas in the project design. Therefore, implementation of the Proposed Project, in addition to the related projects identified in Table 3-1, would not result in cumulatively considerable impacts related to solid waste. Cumulative impacts would therefore be **less than significant**.

Electric Power, Natural Gas, and Telecommunications Facilities

Similar to the Proposed Project, cumulative projects would generally be able to connect to existing utility infrastructure in nearby roadways and would not require the construction of substantial new or expanded facilities. Furthermore, because other jurisdictions in SCE and Southern California Gas Company service areas are also required to meet the state's Title 24 energy efficiency standards, it is anticipated that future development would not contribute to a significant cumulative impact due to increased energy demand and the need for associated infrastructure. Therefore, implementation of the Proposed Project, in addition to the related projects identified in Table 3-1, would not result in cumulatively considerable impacts related to electric power, natural gas, or telecommunications facilities. Cumulative impacts would therefore be **less than significant**.

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4 Other CEQA Considerations

4.1 Introduction

California Environmental Quality Act (CEQA) Guidelines Section 15126 requires Environmental Impact Reports (EIRs) to include a discussion of the significant environmental effects of a project, the unavoidable significant environmental effects if the project is implemented, any irreversible changes should the project be implemented, and growth-inducing impacts. The following section incorporates these analyses, as required by CEQA.

4.2 Effects Found Not to Be Significant

CEQA states that an EIR should focus on the significant effects on the environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence (CEQA Guidelines Section 15143). Effects dismissed in an Initial Study (Environmental Checklist) as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless information inconsistent with the finding in the Initial Study is subsequently received.

Section 21100(c) of the California Public Resources Code states that an EIR must contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the EIR. CEQA Guidelines Section 15128 adds, "Such a statement may be contained in an attached copy of an Initial Study."

The Initial Study prepared and circulated with the Notice of Preparation (provided in Appendices A-2 and A-1, respectively) for public review on March 31, 2021, for the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) concluded that the Proposed Project would not result in significant impacts to the issue areas discussed below.

4.2.1 Aesthetics

The Proposed Project would have a less-than-significant impact to aesthetics for the following reasons:

Scenic Vistas. According to Exhibit 5-4, Scenic Corridors/Gateway, of the March Joint Powers Authority (JPA) General Plan, the area from the project site looking east and northeast of the March JPA planning area toward the San Bernardino, San Jacinto, and Box Spring Mountains is designated as a scenic vista (March JPA 1999). The project site is primarily vacant and undeveloped. The Proposed Project would involve construction of a 180,800-square-foot cargo building on the site. The maximum height of the proposed building would be 45 feet. Although distant scenic vistas of the mountains are visible from the project site, east and south of the site are existing warehouse developments. The existing buildings to the east and south are estimated to be approximately 40 to 50 feet high. Public viewpoints across the site exist from the west along Interstate (I) 215. Views of the San Bernardino and San Jacinto Mountains would likely be experienced by travelers along I-215 when looking east toward the project site. Views of the Box Springs Mountains would likely be experienced by pedestrians traveling north along Heacock Street. Although construction of a new 45-foot-tall cargo building on the site would introduce a new structure, there are existing warehouse developments immediately east and south of the site that are of a similar height to the cargo building proposed as part of the Proposed Project. As such, the Proposed Project would not have a substantial impact

on views toward the Box Spring Mountains from Heacock Street. In addition, due to the distance between I-215 and the project site (approximately 0.85 miles) and the visual prominence of the San Bernardino Mountains (11,499 feet above mean sea level [amsl] at the highest peak) and San Jacinto Mountains (10,833 feet amsl at the highest peak), the height of the new structure would be reduced and the introduction of a 45-foot-tall cargo building would not substantially alter or block views of the San Bernardino or San Jacinto Mountains from I-215. As such, impacts would be **less than significant**.

Scenic Resources within a State Scenic Highway. According to the California Department of Transportation (Caltrans) California Scenic Highway Program, no officially designated or eligible state scenic highways are located adjacent to or near the project site (Caltrans 2020). Therefore, implementation of the Proposed Project would not damage scenic resources within a state scenic highway; **no impact** would occur.

Visual Character or Quality. The project site is located in a non-urbanized area, per the Southern California Association of Governments (SCAG) Region U.S. Census Urbanized Areas map (SCAG 2017) and is visible from public vantage points along adjacent and nearby roadways, including Heacock Street and I-215. Thus, this analysis discusses whether the Proposed Project would substantially degrade the existing visual character or quality of public views of the site and its surroundings. Although the site is primarily undeveloped, and construction of the proposed cargo building and tarmac expansion would change the overall visual character of the site from primarily undeveloped to developed, the proposed land uses to be developed on the site would be similar to the surrounding land uses. Specifically, the approximately 180,800-square-foot cargo building (maximum height of 45 feet) would be constructed near March Air Reserve Base (ARB) aviation and fire department facilities to the north and west; industrial warehousing and logistics buildings of similar bulk and scale to the south; and an approximately 750,000-square-foot, two- to three-story distribution center facility to the immediate east across Heacock Street. Within the larger surrounding area, nearby uses include additional aircraft operation facilities, including the March ARB runways and aircraft parking pads; I-215 and the Riverside National Cemetery to the west; and industrial land uses to the east. The nearest residential uses are buffered from the project site by intervening distribution and logistics warehouse buildings and a constructed wash. Thus, construction and operation of the Proposed Project would blend in with the existing visual character of the larger surrounding area.

Similar to existing warehouse development in the immediate surrounding area, the Proposed Project would include landscaped areas at the project site entrance from the access roadway and on small islands in the two employee parking lots. Landscaped areas within the project site would be compatible with Federal Aviation Administration (FAA) regulations, as well as the Wildlife Hazard Review prepared for the Proposed Project (Appendix J-3) for landscaping in flight paths. Landscaping would include two areas of non-native hydroseed, totaling 137,381 square feet. As required by Chapter 9.17 of the March JPA Development Code (March JPA 2016) and the recommendations in the Wildlife Hazard Review prepared for the Proposed Project, the native hydroseed mix would consist of a drought-tolerant native grass and forb mix, specifically small fescue (*Festuca microstachys*). Along the project site's northern boundary, a 14-foot-high fence compliant with U.S. Department of Defense regulations and requirements would be installed. Along the project site's southern boundary and along the site access roadway, a 10-foot-tall tube steel fence would be installed. A 12-foot-tall concrete masonry unit wall would be installed in the interior of the site to separate Site 7 from areas within the project site accessible to trucks and employees.

Therefore, based on the existing developed nature of the area, which supports numerous distribution and logistics warehouses that are comparable to or of greater bulk and scale than the proposed Air Cargo Center Component, as well as the prevalence of air navigation facilities associated with March ARB, implementation of the Proposed Project would not create substantial visual contrast in the context of the existing visual environment, and impacts to visual character and quality would be **less than significant**.

The project site is not located in an urbanized area; therefore, pursuant to the significance thresholds in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and the March JPA CEQA Guidelines (March JPA 2022), this analysis does not require a discussion as to whether the Proposed Project would conflict with applicable zoning and other regulations governing scenic quality. However, for informational purposes, it is noted that the Proposed Project would comply with the March JPA's Development Code setback requirements, as discussed in Section 3.10, Land Use and Planning, of this EIR. As shown in Table 3.10-7 in Section 3.10, the Proposed Project would comply with the March JPA Development Code standards.

4.2.2 Agriculture and Forestry Resources

The Proposed Project would have no impact to agriculture and forestry resources for the following reasons:

Conversion of Farmland to Non-Agricultural Use. The project site is located in an area designated as Urban and Built-Up Land, and is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the California Department of Conservation Farmland Mapping and Monitoring Program (DOC 2016). Therefore, the Proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. As such, **no impact** would occur.

Conflict with Zoning for Agricultural Use or Williamson Act Contract. The project site is not used or zoned for agricultural purposes, nor is it under a Williamson Act contract. Therefore, the Proposed Project would not conflict with a Williamson Act contract or existing zoning for agricultural use; as such, **no impact** would occur.

Conflict with Zoning for Forest Land or Timberland. The project site is not zoned for forest land or timberland, nor is it within a designated Timberland Production area. Although the site does not have a zoning designation, it is designated Aviation (AV) under the March JPA General Plan, which does not allow for timberland production (March JPA 1999). Therefore, the Proposed Project would not conflict with zoning for forest land, timberland, or timberland production. As such, **no impact** would occur.

Loss of Forest Land or Conversion of Forest Land to Non-Forest Use. There are no forest lands on or in the vicinity of the project site; thus, the Proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. As such, **no impact** would occur.

Conversion of Farmland to Non-Agricultural Use or Forest Land to Non-Forest Use. No portion of the project site is located within existing agricultural areas, nor would implementation of the Proposed Project result in any impacts to ongoing agricultural operations or the conversion of farmland to non-agricultural use. The site is surrounded by existing facilities associated with March ARB and air cargo operations. Therefore, conversion of existing farmland or forest land to non-agricultural or non-forest uses would not occur. As such, **no impact** would occur.

4.2.3 Geology and Soils

The Proposed Project would have a less-than-significant impact to the following geology and soils issue areas:

Rupture of a Known Earthquake Fault. The nearest fault zone, the San Jacinto Fault Zone, is located approximately 9 miles east of the project site (DOC 2018). Construction of the Proposed Project would be required to meet California Building Code (CBC) standards. Additionally, March JPA would review and approve the plans and specifications of the Proposed Project to ensure compliance with the provisions of the CBC and Title 24, which regulates building standards. Title 24 is administered by the California Building Standards Commission, which, by

law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable. Because the project site is not within an Alquist-Priolo Earthquake Fault Zone, pursuant to the California Department of Conservation's Fault Activity Map of California (DOC 2018), and given that the Proposed Project is required to comply with the provisions of the CBC and Title 24, the potential for exposing people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known Alquist-Priolo earthquake fault, is low. Therefore, impacts related to the rupture of a known earthquake fault would be **less than significant**.

Landslides. The project site and surrounding area are relatively flat. According to the County of Riverside General Plan Safety Element, the project site is not located on, adjacent to, or near an earthquake-induced slope instability or landslide area (County of Riverside 2021, Figure S-4). Additionally, the Proposed Project would undergo staff review by March JPA to ensure that grading activities would not be subject to, or result in, landslides. Therefore, impacts related to landslides would be **less than significant**.

Soil Erosion or Loss of Topsoil. Construction activities, such as excavation and grading, may have the potential to cause short-term soil erosion or the loss of topsoil. Short-term erosion effects during construction of the Proposed Project would be minimized through implementation of a stormwater pollution prevention plan (SWPPP) as required in compliance with the National Pollutant Discharge Elimination System program, and through incorporation of best management practices intended to reduce soil erosion. The project applicant would prepare a SWPPP for the Proposed Project to comply with the National Pollutant Discharge Elimination System program. The SWPPP is required by March JPA during plan review and approval of improvement plans. The SWPPP would include standard construction methods, such as temporary detention basins, to control on-site and off-site erosion. With implementation of an approved SWPPP, impacts resulting from soil erosion or loss of topsoil would be minimized and impacts would be **less than significant**.

Septic Tanks/Alternative Wastewater Disposal Systems. The Proposed Project would not result in the need for a septic tank or alternative wastewater disposal system because the facilities constructed would connect to an existing sewer system and would not involve other alternative wastewater disposal methods. As such, **no impact** would occur.

4.2.4 Hazards and Hazardous Materials

The Proposed Project would have a less-than-significant impact to the following hazards and hazardous material issue areas:

Emission or Handling of Hazardous Materials within 0.25 Miles of a School. The project site is not located within 0.25 miles of an existing or proposed school. As such, **no impact** would occur.

Interference with an Adopted Emergency Response Plan or Emergency Evacuation Plan. March JPA adopted a Disaster Preparedness and Recovery Plan within the Safety/Risk Management Element of its General Plan (March JPA 1999). This plan outlines the implementation programs needed to prevent risks to occupants and to minimize injury from an unavoidable disaster or emergency. With compliance with the March JPA General Plan Disaster Preparedness and Recovery Plan programs, impacts would be less than significant.

An existing access roadway off Heacock Street, approximately 3.5 to 4 roadway miles east of the nearest I-215 on-and off-ramps, would be expanded to provide access to the project site. According to the March JPA General Plan's Transportation Element, Heacock Street is classified as a Major Arterial roadway, which provides access to

I-215 to the north via Cactus Avenue (Arterial Highway), and to the south via San Michele Road (Minor Arterial), Indian Street (Minor Arterial), and Oleander Avenue (Arterial Highway) (March JPA 1999). The proposed site plan, including the access roadway, would be reviewed and approved by March JPA, the Riverside County Fire Department (RCFD), and the Riverside County Sheriff's Department (RCSD) during plan review to ensure that emergency access would be provided at all times. Therefore, impacts would be **less than significant**.

Exposure of People or Structures to Significant Risk of Loss, Injury, or Death Involving Wildland Fires. As indicated in the County of Riverside General Plan Safety Element (County of Riverside 2021, Figure 7), and according to the Map My County – Riverside County database (County of Riverside 2022), the project site is not in or near local or state responsibility areas or lands classified as very high fire hazard severity zones. As a result, the Proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Impacts would be **less than significant**.

4.2.5 Land Use and Planning

The Proposed Project would have a less-than-significant impact to the following land use and planning issue area:

Physical Division of an Established Community. The project site is located on approximately 46 acres in unincorporated Riverside County. The Air Cargo Center Component is located on 34 acres within the southeastern portion of the jurisdiction of March JPA and the Off-Site Component is located on 12 acres within March ARB. The primarily undeveloped project site is surrounded by industrial warehouse uses to the south and east and is partially on and partially adjacent to March ARB to the north and west, which includes military uses and an active airfield. Immediately north of the site is the March ARB Fire Department. The project site is located within the boundaries of the March ARB Redevelopment Project and has been designated for Aviation (AV) use in the March JPA General Plan (March JPA 1999). Therefore, development of the Proposed Project would not physically divide an established community given that the site is adjacent to existing industrial warehouse uses and an operating airfield. As such, **no impact** would occur.

4.2.6 Mineral Resources

The Proposed Project would have a less-than-significant impact to mineral resources for the following reasons:

Loss of a Known Mineral Resource. The project site lies within Mineral Resource Zone 3 (MRZ-3), as depicted in Figure OS-6 of the Riverside County General Plan, indicating areas where the available geologic information suggests that mineral deposits are likely to exist but where the significance of the deposit is undetermined (County of Riverside 2015). The project site's March JPA General Plan land use designation is Aviation (AV), and it is proposed to remain Aviation. This land use designation does not allow for mining activities (March JPA 1999). Additionally, the site is surrounded by commercial, industrial, and military land uses in the local vicinity that would be incompatible with a mining operation on the site. Therefore, the Proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region or residents of the state. As such, **no impact** would occur.

Loss of a Locally Important Mineral Resource Recovery Site. The project site is not designated as a locally important mineral resource recovery site in the March JPA General Plan (March JPA 1999). Therefore, the Proposed Project would not result in the loss of availability of a locally important mineral resource recovery site delineated in a local general plan, specific plan, or other land use plan. As such, **no impact** would occur.

4.2.7 Population and Housing

The Proposed Project would have a less-than-significant impact on population and housing for the following reasons:

Substantial Unplanned Population Growth. The Proposed Project would not involve development of housing and therefore would not directly induce substantial population growth. Once the Proposed Project is built, operation is anticipated to generate approximately 150 permanent employment opportunities. According to SCAG's Demographics and Growth Forecast (Growth Forecast) provided in the adopted 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS) (SCAG 2020a), employment opportunities are anticipated to grow from 76,100 in 2016 to 139,600 by 2045 in unincorporated Riverside County. Employment throughout Riverside County, including incorporated cities, is anticipated to grow from 743,000 in 2016 to 1,103,000 by 2045 (SCAG 2020b). The estimated employee count for the Proposed Project (150) would be less than 1% of the total employment in SCAG's Growth Forecast under the adopted 2020–2045 RTP/SCS. This increase in employment would be minimal in comparison to the anticipated increase of SCAG's Growth Forecast. It is anticipated that these new jobs would be filled by the existing residential population from the greater Riverside County area. Therefore, the Proposed Project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Impacts would be **less than significant**.

Displacement of People or Housing. The Proposed Project would not displace existing people or housing because the project site is primarily vacant and undeveloped and does not contain existing housing. Construction of replacement housing would not be necessary as a result of the Proposed Project. As such, **no impact** would occur.

4.2.8 Public Services

The Proposed Project would have a less-than-significant impact on public services for the following reasons:

Need for Construction of New or Altered Governmental Facilities to Maintain Performance Objectives for the Following Public Services:

Fire Protection. The Proposed Project would be served by RCFD. The closest RCFD station to the project site is Station 65, Moreno Valley Station (15111 Indian Street, Moreno Valley), which is approximately 2 miles northeast of the project site. An existing access roadway off Heacock Street would be expanded to provide access to the project site. According to the March JPA General Plan's Transportation Element, Heacock Street is classified as a Major Arterial roadway, which would be used by fire protection vehicles coming from Station 65 to access the site (March JPA 1999). No roadway improvements or changes to the existing circulation system would be made that would impede the ability of the existing fire services to serve the Proposed Project.

RCFD has a Mutual Aid Agreement with the March ARB Fire Department, which allows each fire department to provide fire protection aid to the other, when needed (RCFD 2009). In addition, per the joint use agreement between March JPA and the United States Department of the Air Force (DAF), DAF has agreed to respond to fire and crash and rescue emergencies on March JPA-owned or leased property involving civil aircraft outside of the hangars or other structures within the limits of its capabilities, equipment, and available personnel at the request of the March Inland Port Airport Authority, subject to certain conditions, as outlined in the joint use agreement (MIPAA and DAF 2014). The proposed site plan, including the access roadway expansion, would be reviewed and approved by March JPA, RCFD, and RCSD during plan review to ensure that emergency access would be provided at all times. RCFD's

review and approval of plans would ensure that the Proposed Project complies with the California Fire Code (24 CCR Part 9). Additionally, RCFD reviewed the Notice of Preparation and Initial Study prepared for the Proposed Project, stating that the department had no concerns regarding the public service provisions for the Proposed Project (Appendices A-1 and A-2 of this EIR).

The project applicant would be required to install fire safety devices, such as fire alarms and zoned fire sprinkler systems, to prepare the proposed development for emergency situations. Operation of the Proposed Project would generate approximately 150 jobs, which it is assumed would be filled by the existing residential population from the greater Riverside County area. The associated land uses would be similar to those in the surrounding developments and would not be anticipated to require additional fire protection services beyond what is already provided. As such, the Proposed Project would not result in substantial population growth within RCFD's jurisdiction that would burden existing fire services. Moreover, the Proposed Project is subject to the payment of a development impact fee (DIF) related to fire protection. The Proposed Project's DIF amount for fire protection facility fees is determined based on Ordinance No. JPA 15-01 (March JPA 2015). The payment of these fees would provide funding for capital improvements such as land and equipment purchases and fire station construction. The Proposed Project would not result in the need for new or altered fire protection facilities to maintain acceptable service ratios, response times, or other performance objectives. Therefore, impacts would be **less than significant**.

Police Protection. The Proposed Project would be served by RCSD. The closest police station to the project site is the RCSD Moreno Valley Station (22850 Calle San Juan De Los Lagos, Moreno Valley, California 92553), located approximately 3.5 miles north of the project site. An existing access roadway off Heacock Street would be expanded to provide access to the project site. According to the March JPA General Plan's Transportation Element, Heacock Street is classified as a Major Arterial roadway, which would be used by police protection vehicles coming from the Moreno Valley Station to access the project site (March JPA 1999). No roadway improvements or changes to the existing circulation system would be made that would impede the ability of the existing police services to serve the site. Land uses associated with the Proposed Project would be similar to the surrounding developments and are not anticipated to require additional police protection services beyond what is already provided to the area. As such, the Proposed Project would not burden RCSD's existing police protection services. In addition, the Proposed Project is subject to the payment of a DIF for criminal justice public facilities. The Proposed Project's DIF amount for criminal justice public facility fees is determined based on Ordinance No. JPA 15-01 (March JPA 2015). The payment of these fees would provide funding for capital improvements such as land and equipment purchases and criminal justice facility construction. Because the Proposed Project would introduce a land use that is consistent with surrounding development, would be constructed in an area that is already served by police protection services, and would pay the required DIF, the Proposed Project would not require new or altered police protection facilities to maintain acceptable service ratios, response times, or other performance objectives. Therefore, impacts to police protection services would be **less than significant**.

Schools, Parks, and Other Public Facilities. As stated in Section 4.2.7, Population and Housing, the increase in employment from the Proposed Project would be minimal in comparison to the anticipated increase of SCAG's Growth Forecast (SCAG 2020b). The Proposed Project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. As such, the Proposed Project would not generate substantial population growth, and there would be no substantial impact to schools, parks, libraries, or other public facilities. Impacts would be **less than significant**.

4.2.9 Recreation

The Proposed Project would have a less-than-significant impact on recreation for the following reasons:

Deterioration of Existing Parks. The Proposed Project would involve construction and operation of an Air Cargo Center Component and an Off-Site Component, with no plans to develop housing. Operation would generate approximately 150 jobs, which it is assumed would be filled by the existing residential population from the greater Riverside County area. The Proposed Project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Furthermore, the March JPA General Plan does not designate the project site or adjacent properties as open space areas (March JPA 1999). Because implementation of the Proposed Project would not result in population growth or new housing, there would be minimal to no increase in the use of existing parks and recreational facilities. In addition, as shown in Figure 3.11-11, Baseline + Project Non-Peak Aircraft Operation Noise Levels, and Figure 3.11-12, Baseline + Project Peak Aircraft Operation Noise Levels, no existing parks would be located within the project site's aircraft operational noise contour; therefore, no parks would be subjected to aircraft noise disturbance beyond the noise levels that were projected to be generated by air cargo operations under the 2018 Air Installations Compatible Use Zones (AICUZ) Study (March ARB 2018), shown in Figure 3.11-4, March ARB 2018 AICUZ Noise Contours. Impacts would be **less than significant**.

Construction or Expansion of Recreational Facilities. The Proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities. Operations would generate approximately 150 jobs, which it is assumed would be filled by the existing residential population from the greater Riverside County area. The Proposed Project would not stimulate population growth such that additional recreational facilities would be needed. Furthermore, the March JPA General Plan does not allow recreational facilities within or adjacent to the project site (March JPA 1999). As such, **no impact** would occur.

4.2.10 Transportation

The Proposed Project would have a less-than-significant impact to the following transportation issue areas:

Geometric Design Feature or Incompatible Use Hazards. Regional access to the project site is provided via I-215, with local access provided via Heacock Street. The proposed vehicular access point and circulation outside and inside the site, including the Proposed Project's parking lot, would be reviewed and approved by March JPA's planning and engineering staff. The Proposed Project does not include any non-standard design features, nor does it have any hazardous elements. Impacts would be **less than significant**.

Inadequate Emergency Access. The Proposed Project would result in development of a currently undeveloped site. Access to the project site would be provided through a signalized entrance along Heacock Street, expanding the existing access roadway to the facilities south of the site. Access to the project site would be designed according to March JPA standards and all applicable emergency access standards. Through March JPA's site plan review, March JPA would ensure that the Proposed Project meets code requirements related to emergency access. Impacts would be **less than significant**.

4.2.11 Wildfire

The Proposed Project would have a less-than-significant impact regarding wildfire for the following reasons:

Impairment of an Adopted Emergency Response or Evacuation Plan. March JPA adopted a Disaster Preparedness and Recovery Plan within the Safety/Risk Management Element of its General Plan (March JPA 1999). This plan outlines the implementation programs needed to prevent risks to occupants and to minimize injury from an unavoidable disaster or emergency. Any potential impacts created by the Proposed Project would be less than significant with implementation of the Disaster Preparedness and Recovery Plan programs within the March JPA General Plan. The entrance to the project site would be located along Heacock Street, approximately 3.5 to 4 roadway miles east of the nearest I-215 on- and off-ramps. An access roadway to the site would be provided on Heacock Street. According to the March JPA General Plan's Transportation Element, Heacock Street is classified as a Major Arterial roadway, which provides access to I-215 to the north via Cactus Avenue (Arterial Highway), and to the south via San Michele Road (Minor Arterial), Indian Street (Minor Arterial), and Oleander Avenue (Arterial Highway) (March JPA 1999). The proposed site plan, including expansion of the existing access roadway, would be reviewed and approved by March JPA, RCSD, and RCFD during plan review to ensure that emergency access would be provided at all times. Therefore, implementation of the Proposed Project would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be **less than significant**.

Exacerbation of Wildfire Risks That Could Expose Occupants to Pollutant Concentrations from a Wildfire or to Uncontrolled Spread of Wildfire. As shown in the County of Riverside General Plan Safety Element, the project site is not in or near a local or state responsibility area, or lands classified as very high fire hazard severity zones (County of Riverside 2021, Figure S-11). Thus, the Proposed Project would not exacerbate wildfire risks, exposing Proposed Project occupants to pollutant concentrations from a wildfire or to the uncontrolled spread of a wildfire. Impacts would be less than significant.

Requirement of Installation or Maintenance of Infrastructure That May Exacerbate Wildfire Risk or Result in Temporary or Ongoing Impacts to the Environment. The Proposed Project would not require the installation or maintenance of new infrastructure such as roadways, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Additionally, the project site is not located in a very high fire hazard severity zone. As such, **no impact** would occur.

Exposure of Occupants to Flooding Risk or Landslides as a Result of Runoff, Post-Fire Instability, or Drainage Changes. The project site is not located in or near a local or state responsibility area, or in or near lands classified as very high fire hazard severity zones (County of Riverside 2021). Thus, the Proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes within or near a local or state responsibility area or very high fire hazard severity zone. The project site is located within Zone D (areas in which flood hazards are undetermined, but possible) on Federal Emergency Management Agency Flood Insurance Rate Maps 06065C0765G and 06065C0745G (FEMA 2008), and there are existing drainage features traversing the site; however, given that the site is not located in a designated fire hazard zone, the Proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes within or near a local or state responsibility area or very high fire hazard severity zone. Impacts would be **less than significant**.

4.3 Significant and Unavoidable Environmental Effects

CEQA Guidelines Section 15126(b) further directs EIRs to address impacts from a project that will result in significant impacts, including those that cannot be mitigated below a level of significance. A summary of all the environmental issue areas and the significance of potential project-related impacts, as well as a list of mitigation measures, is provided in the Executive Summary of this EIR. To summarize, the following issue areas would result in significant impacts even after mitigation measures, when feasible, have been incorporated, thus resulting in unavoidable impacts:

- **Air Quality.** As discussed in Section 3.2.5, the Proposed Project would exceed operational regional thresholds of significance for volatile organic compounds, oxides of nitrogen, and carbon monoxide emissions, resulting in a significant impact. **Mitigation Measure (MM) AQ-3 through MM-AQ-6** would reduce emissions, but not to a less-than-significant level. As such, the Proposed Project would have a **significant and unavoidable** impact related to Threshold AQ-2 and would result in a cumulatively considerable net increase of criteria pollutants for which the region is in nonattainment. Additionally, the Proposed Project would have a **significant and unavoidable** impact related to Threshold AQ-1 and would conflict with South Coast Air Quality Management District's 2022 Air Quality Management Plan.
- **Noise.** The Proposed Project would expose noise-sensitive residential receptors nearest the March ARB/Inland Port Airport flight path to excessive operational noise levels. Due to the nature of noise levels generated by aircraft landings and take-offs (i.e., acoustic energy affecting the roof, walls, windows, and doors), reducing the noise-level increase resulting from airborne operations is difficult. The primary mitigation measures suitable for addressing airborne aircraft noise can include modifications to the flight path, restrictions on hours of operation, limiting the number of flight operations, substituting aircraft type, or providing sound insulation treatment programs for those affected by aviation noise. However, March JPA does not have the authority to modify flight paths at March ARB/Inland Port Airport or to mandate aircraft types. Additionally, the level of restriction on flight operations and incomplete involvement in sound insulation programs often result in limitations on achieving the necessary noise level reductions. **MM-NOI-2** would reduce impacts but not to a less-than-significant level. Therefore, Threshold NOI-3 in Section 3.11.5, would be **significant and unavoidable** even with the application of feasible mitigation.

4.4 Significant Irreversible Changes

CEQA Guidelines mandate that EIRs address any significant irreversible environmental changes that would occur if a project is implemented (14 CCR 15126[c]). An impact would fall into this category if (14 CCR 15126.2[d]):

- The project would involve a large commitment of nonrenewable resources.
- The primary and secondary impacts of the project would generally commit future generations of people to similar uses.
- The project involves uses in which irreversible damage could result from any potential environmental incidents associated with the project.
- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

Determining whether the Proposed Project may result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Although the project site is mostly vacant, it consists of previously disturbed land and is surrounded by existing airport and transportation/goods distribution uses. Thus, although converting the land to the proposed air freight cargo center would result in a new commitment of land, it would not preclude the possibility of restoring the site to its current condition in the future. However, implementation of the Proposed Project would require the long-term commitment of nonrenewable resources for construction and operation. This would represent the loss of renewable and nonrenewable resources that are generally not retrievable, as discussed below.

Construction of each of the Proposed Project components (the Air Cargo Center Component and the Off-Site Component) would result in the use of nonrenewable resources and energy sources, including fossil fuels, natural gas, and electricity, as discussed in Section 3.5, Energy, of this EIR. Fossil fuels would be used to power construction equipment and delivery and construction employee vehicles. Construction equipment would also use electricity and natural gas. Use of these energy sources would be considered a permanent commitment of resources. However, Proposed Project impacts related to consumption of nonrenewable resources during construction are considered to be less than significant because the Proposed Project would not use unusual or wasteful amounts of energy or construction materials. Refer to Section 3.5 for a discussion of energy use during construction of the Proposed Project, and conservation measures that would be implemented. As described therein, there is sufficient capacity to serve construction of the Proposed Project.

In addition to energy resources, a variety of nonrenewable resource materials would be used to construct the proposed facilities, including steel, wood, concrete, and fabricated materials. Once these materials are used for construction, the commitment of such materials would represent the loss of nonrenewable resources and would be considered irreversible. However, these construction materials would likely be committed to other development projects in the region if not used for the Proposed Project. Moreover, the resources used for construction of the Proposed Project would be typical of similar developments in the region that include development of air cargo distribution centers. Therefore, although irretrievable commitments of resources would result from construction of the Proposed Project, such impacts would be less than significant.

Once operational, the Proposed Project would also require energy resources, such as electricity, natural gas, and various transportation-related fuels, including jet fuel to serve airplanes. The Proposed Project would consume more energy on a daily basis than is currently consumed on the project site because the site is mostly vacant, and the only energy-utilizing uses within the project site are two well-extraction facilities. Once operational, the cargo building and its transportation- and aviation-related uses would require the use of nonrenewable energy resources, which would be an irreversible commitment of such resources.

Although the resources used for the Proposed Project would be permanently committed and therefore would be considered irreversible, the Proposed Project would not consume an unusual or wasteful amount of energy or materials and would comply with California Building Energy Efficiency Standards (24 CCR Part 6). In addition, the Proposed Project would implement mitigation measures, including **MM-AQ-1 through MM-AQ-6** and **MM-GHG-1**, that would serve to reduce the Proposed Project's use of nonrecoverable materials and energy. The Proposed Project design and associated utilities are all subject to regulations that are working to reduce the amount of nonrenewable resources used by development projects. Although sustainability measures would reduce the materials and energy used during construction and operation of the Proposed Project, these resources would nevertheless be unavailable for other uses. The resources used for the Proposed Project would be permanently committed and therefore would be considered irreversible.

Regarding uses in which irreversible damage could result from any potential environmental incidents associated with the Proposed Project, irreversible impacts may also occur from environmental damage, such as spill or release of hazardous materials or accidental fire resulting from mechanical or industrial failure. Although there are many other types of accidents possible, those listed above represent the key sources for irreversible damage that can be associated with the types of future development proposed. However, it is assumed that all new uses of hazardous materials would occur pursuant to applicable laws and regulations. That is, industrial uses involving hazardous materials would obtain and comply with a valid materials license specifying the requisite safety measures for the use, handling, storage, transportation, and disposal of these materials. In addition, the Proposed Project would implement mitigation measures, including **MM-HAZ-1 through MM-HAZ-3**, that would serve to ensure that impacts related to hazardous material releases or spills would be avoided. Therefore, this would not be considered a significant irreversible environmental effect or cause irreversible environmental damage.

4.5 Growth-Inducing Impacts

Section 15126.2(e) of the CEQA Guidelines requires a discussion of how the potential growth-inducing impacts of a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Induced growth is separate from the direct employment, population, or housing growth associated with a project (14 CCR 15126.2[e]). If a project has characteristics that “may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively,” then these aspects of the project must be discussed as well. Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place in the absence of that project. Typically, the growth-inducing potential of a project is considered significant if it stimulates population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities, such as SCAG.

The CEQA Guidelines also indicate that growth should not be assumed to be either beneficial or detrimental (14 CCR 15126.2[e]). According to Section 15126.2(e) of the CEQA Guidelines, a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria:

- The project would remove obstacles to population growth.
- Increases in the population may tax existing community service facilities, causing significant environmental effects.
- The project would encourage and facilitate other activities that could significantly affect the environment.

According to SCAG’s Growth Forecast (an appendix to the SoCal Connect 2020–2045 RTP/SCS; SCAG 2020a), employment is anticipated to grow from 76,100 in 2016 to 139,600 by 2045 in unincorporated Riverside County (SCAG 2020b). Employment throughout Riverside County, including incorporated cities, is anticipated to grow from 743,000 in 2016 to 1,103,000 by 2045 (SCAG 2020b). The total number of employees/staff for the Proposed Project at buildout is estimated to be 150, which would be approximately 0.04% of the total employment in SCAG’s Growth Forecast from 2016 to 2045. The increase in employment would be minimal in comparison to the anticipated increase in the SCAG Growth Forecast. Therefore, the Proposed Project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities.

Indirect growth can also occur by a project installing infrastructure that can support further growth. The project site is served by existing public services and utilities, and no new off-site utility systems would be needed to serve the Proposed Project. As discussed in Chapter 2, Project Description, of this EIR, the Proposed Project would include construction of a 225-foot right-turn pocket into the existing access roadway along the southbound side of Heacock Street and installation of a traffic signal at the existing access roadway. These improvements would not represent the installation of new infrastructure, but the improvement of existing infrastructure. Therefore, indirect growth inducement as a result of the extension of these facilities into a new area would not occur.

Overall, the Proposed Project would indirectly stimulate population growth through the addition of new employees/staff. This growth would be consistent with employment growth envisioned in local and regional land use plans and in projections made by regional planning authorities, because the planned growth of the Proposed Project and its land use intensity have been factored into the underlying growth projections of the SCAG 2020-2045 RTP/SCS (SCAG 2020a, 2020b).

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5 Alternatives

5.1 Introduction

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, an Environmental Impact Report (EIR) is required to “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives” (14 CCR 15126.6[a]). An EIR “must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation” (14 CCR 15126.6[a]). This alternatives discussion is required even if these alternatives “would impede to some degree the attainment of the project objectives or would be more costly” (14 CCR 15126.6[b]).

The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is, in fact, “feasible.” The final decision regarding the feasibility of alternatives lies with the decision maker for a given project, who must make the necessary findings addressing the potential feasibility of an alternative, including whether it meets most of the basic project objectives and reduces the severity of significant environmental effects pursuant to CEQA (California Public Resources Code Section 21081; refer also to 14 CCR 15091).

5.2 Project Objectives

In developing the alternatives to be addressed in this chapter, consideration was given to the ability to meet the basic objectives of the proposed Meridian D-1 Gateway Aviation Center Project (Proposed Project) and eliminate or substantially reduce the identified significant environmental impacts. As stated in Chapter 2, Project Description, of this EIR, the project objectives against which the alternatives were analyzed include the following:

- More fully utilize the operations capacity of the March Inland Port Airport to meet regional demands for air cargo services within Southern California and the greater region, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region.
- Provide appropriate land use intensities to comply with the parameters of the March Air Reserve Base/ Inland Port Airport Compatibility Plan.
- Avoid impacts to, or impediment of, the remediation of the burn areas within Site 7.
- Provide increased job opportunities for local residents through the provision of employment-generating businesses.
- Improve access for airport users to the existing taxiways.
- Facilitate development of aviation uses other than federal military aviation.

5.3 Alternatives Considered but Rejected

As set forth in CEQA Guidelines Section 15126.6(c), an EIR should identify any alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for rejection. According to the CEQA Guidelines, among the factors that may be used to eliminate an alternative from detailed consideration are the alternative’s failure to meet most of the basic project objectives, the alternative’s infeasibility, or the alternative’s inability to avoid significant environmental impacts. The following discussion presents information on alternatives to the

Proposed Project that were considered but rejected. These alternatives are not discussed in further detail and have been eliminated from further consideration.

5.3.1 Alternate Site

In accordance with CEQA Guidelines Section 15126.6(f)(2), March JPA attempted to identify a feasible alternative off-site location within the project area that could be available for the development of the Proposed Project. Pursuant to CEQA Guidelines Section 15126.6(f)(2)(A), the key question and first step in analysis of the off-site location is whether any of the significant effects of a project would be avoided or substantially lessened by moving that project to another location. After a review of available open spaces of approximately 34 acres (similar to the Air Cargo Center Component) around March Inland Port (MIP) Airport, no additional sites that could accommodate the Proposed Project were found (March JPA 2013). Additionally, the project applicant does not have ownership of 34 acres elsewhere within the project vicinity such that the Proposed Project could be developed on an alternate site. Therefore, off-site locations capable of accommodating the entire Proposed Project are considered infeasible, and no off-site location alternatives were carried forward in this analysis.

5.3.2 Reduced Building Square Footage Alternative

A Reduced Building Square Footage Alternative was considered but rejected because it would fail to avoid any significant environmental impacts. Under the Reduced Building Square Footage Alternative, all significant and unavoidable impacts identified for the Proposed Project (air quality and noise) would be the same because there would be no change in the number of annual aircraft operations, nor would there be any reduction in employee count. Thus, air quality emissions due to aircraft operations that exceed the significant thresholds identified in Section 3.2, Air Quality, would remain the same under the Reduced Building Square Footage Alternative. With no reduction in the number of aircraft operations, personnel, or on-site or off-site sources of noise, the Proposed Project's significance conclusion would remain the same under the Reduced Building Square Footage Alternative. Thus, this alternative would not reduce the significant and unavoidable air quality or noise impacts. For these reasons, the Reduced Building Square Footage Alternative was considered but rejected because it would fail to avoid or significantly reduce any significant environmental impacts.

5.4 Alternatives under Consideration

This section discusses the alternatives to the Proposed Project under consideration, including the No Project Alternative. The No Project Alternative, which is a required element of an EIR pursuant to Section 15126.6(e) of the CEQA Guidelines, examines the environmental effects that would occur if a project were not to proceed and no development within a project site were to occur. The other alternatives are discussed as part of the "reasonable range of alternatives" selected by the lead agency.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Proposed Project consists of two components: the Air Cargo Center Component and the Off-Site Component. The Air Cargo Center Component involves the development of a gateway air freight cargo center, including taxiway/taxiway and parking improvements, within an approximately 34-acre site within MIP Airport under the jurisdiction of March JPA. The Off-Site Component of the Proposed Project includes taxiway and other infrastructure improvements within approximately 12 acres of March Air Reserve Base (ARB). Once constructed, the Proposed Project is anticipated to average 17 two-way flights per day, 6 days per week (Non-Peak). During the Peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 two-way flights per day, 6 days per week. Aircraft operations would

occur between 7:00 a.m. and 11:00 p.m. (approximately 5% of the proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).

The alternatives briefly described in the following paragraphs are addressed in this section. Existing conditions on the project site are described in Section 5.4.1, and more detailed discussions of the project alternatives follow in Sections 5.4.2 through 5.4.5.

Alternative 1: No Project Alternative

Under Alternative 1, development of the Proposed Project would not occur as discussed in Chapter 2, Project Description, of this EIR. The project site would remain unchanged, and no development would occur. As a result, the proposed Zoning Designation, Plot Plan, and all other applicable pending approvals associated with the Proposed Project would not be necessary, because no new development would occur on the site that would require such actions.

Alternative 2: Nighttime Flight Noise Reduction Alternative

Under Alternative 2, the Nighttime Flight Noise Reduction Alternative, buildout of the project site would occur in an identical manner to the Proposed Project. Thus, Alternative 2 would result in the development of the Air Cargo Center Component and the Off-Site Component as discussed in Chapter 2, Project Description. The cargo building, all proposed taxiway and aircraft parking apron improvements, utility improvements, landscaping, and internal driveway/parking lot, as well as the work within the right-of-way along Heacock Street, would be constructed in the exact same manner as the Proposed Project. In addition, all off-site work planned under the Proposed Project, including the work to be completed in Work Areas 1–5, would occur under this alternative.

The operational aspects of the cargo building would remain the same as those identified for the Proposed Project. Regarding flight operations, once constructed, Alternative 2 would average 17 flights per day, and flights would occur 6 days a week, the same as the Proposed Project. During the end-of-the-year holiday season, Alternative 2 would average 22 flights per day, 6 days per week, the same as the Proposed Project. Annual cargo aircraft operations would remain at 10,608 operations per year, with the cargo aircraft fleet also consisting of Boeing 767-300 aircraft. However, under Alternative 2, no flight operations would occur during nighttime hours (10:00 p.m. to 7:00 a.m.), which would typically occur between 10:00 p.m. and 11:00 p.m. (approximately 5% of the Proposed Project's flight operations). Thus, flight operations under Alternative 2 would occur only from 7:00 a.m. to 10:00 p.m.

Alternative 3: Reduced Flight Operations Alternative

Under Alternative 3, Reduced Flight Operations Alternative, buildout of the project site would occur in an identical manner to the Proposed Project. Thus, Alternative 3 would result in the development of the Air Cargo Center Component and the Off-Site Component as discussed in Chapter 2, Project Description. The cargo building, all proposed taxiway and aircraft parking apron improvements, utility improvements, landscaping, and internal driveways/parking lots, as well as the work within the right-of-way along Heacock Street, would be constructed in the exact same manner as the Proposed Project. In addition, all off-site work planned under the Proposed Project, including the work to be completed in Work Areas 1–5, would occur under Alternative 3.

Under Alternative 3, annual flight operations would be reduced by 10%, resulting in total annual 9,548 flight operations, with the cargo aircraft fleet also consisting of Boeing 767-300 aircraft. Flight operations would occur during the same hours as the Proposed Project. Operation of the air cargo center would similarly be reduced by 10%.

Alternative 4: Private Aircraft Services Alternative

Under Alternative 4, the Private Aircraft Services Alternative, a private aircraft terminal facility would be constructed within the same building footprint as the cargo building planned under the Proposed Project. The private aircraft terminal facility would be used to provide either a new operation or an expansion of the private aircraft service facilities located south of the project site to allow for an increase in the use of private aircraft services from MIP Airport. With construction of a private aircraft terminal facility, the 9 grade-level loading doors, 31 truck dock positions, and 37 trailer storage positions planned under the Proposed Project would not be constructed. Development under this alternative would include construction of a tarmac and parking apron, allowing aircraft to access the terminal facility. This would include construction of a new taxilane (Taxilane J) that would provide aircraft access to the existing Taxiway A within March ARB. Alternative 4 would also include an expansion of Taxiway G and construction of a parking apron adjacent to the western boundary of the terminal facility. The proposed tarmac expansion, Taxilane J, and parking apron would be sized to accommodate private aircraft and would be paved to meet FAA standards. Construction of the tarmac expansion both within the project site and within March ARB would occur in the same manner as that for the Proposed Project. Access to the project site, as well as the terminal facility, would be constructed in the same manner as that for the Proposed Project. In addition, all off-site work planned under the Proposed Project, including the work to be completed in Work Areas 1–5, would occur under this alternative. Overall, development of Alternative 4 would result in similar construction activities as those for the Proposed Project, with the only change being the ultimate operational use associated with the building to be constructed in place of the cargo building.

Once operational, Alternative 4 would accommodate private aircraft, rather than commercial aircraft, in contrast to the Proposed Project. In addition, because there would be no air cargo facility constructed under this alternative, no air cargo would be transported to or from the project site, eliminating the movement of goods-distribution trucks to and from the project site. However, personal vehicle trips would be added for passengers of the private aircraft, and the anticipated number of employees would be 52, resulting in a reduction of employees compared to the Proposed Project. Annual flights under Alternative 4 would remain the same as the Proposed Project; however, flight operations would not occur between 10:00 p.m. and 11:00 p.m. (approximately 5% of the Proposed Project’s flight operations).

Pursuant to the CEQA Guidelines stated above, as well as the project objectives, a range of alternatives to the Proposed Project are considered and evaluated in this Draft EIR. In accordance with the CEQA Guidelines Section 15126.6(d), the discussion of the environmental effects of the alternatives may be less detailed than the discussion of the impacts of the Proposed Project. Table 5-1 provides a summary of the comparison of the impacts of the alternatives with the Proposed Project; an analysis of the environmentally superior alternative is provided in Section 5.5.

Table 5-1. Comparison of Impacts from the Proposed Project and Alternatives

Environmental Topic	Proposed Project	Alternative 1 No Project Alternative	Alternative 2 Nighttime Flight Noise Reduction Alternative	Alternative 3 Reduced Flight Operations Alternative	Alternative 4 Private Aircraft Services Alternative
Aesthetics	LTS	▼ No impact	▼ LTS	▼ LTS	▼ LTS
Air Quality	SUI (operational NO _x)	▼ No impact	= SUI	▼ SUI	▼ LTS

Table 5-1. Comparison of Impacts from the Proposed Project and Alternatives

Environmental Topic	Proposed Project	Alternative 1 No Project Alternative	Alternative 2 Nighttime Flight Noise Reduction Alternative	Alternative 3 Reduced Flight Operations Alternative	Alternative 4 Private Aircraft Services Alternative
Biological Resources	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Cultural Resources	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Energy	LTS	▼ No impact	= LTS	▼ LTS	▼ LTS
Geology and Soils	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Greenhouse Gas Emissions	LTS + mitigation	▼ No impact	= LTS + mitigation	▼ LTS + mitigation	▼ LTS + mitigation
Hazards/Hazardous Materials	LTS + mitigation	▼ No impact	= LTS + mitigation	▼ LTS + mitigation	▼ LTS + mitigation
Hydrology/Water Quality	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Land Use/Planning	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Noise	SUI	▼ No impact	▼ SUI	▼ SUI	▼ LTS
Transportation	LTS + mitigation	▼ No impact	= LTS + mitigation	▼ LTS + mitigation	▼ LTS + mitigation
Tribal Cultural Resources	LTS + mitigation	▼ No impact	= LTS + mitigation	= LTS + mitigation	= LTS + mitigation
Utilities/Service Systems	LTS	▼ No impact	= LTS	▼ LTS	▼ LTS

Notes: LTS = less than significant; SUI = significant and unavoidable; LTS + mitigation = less than significant with mitigation incorporated. **Green** = No impact or less than significant; **Yellow** = less than significant with mitigation incorporated; **Red** = significant and unavoidable.

- ▲ Impacts would be greater than those of the Proposed Project.
- = Impacts would be comparable to those of the Proposed Project
- ▼ Impacts would be reduced compared to those of the Proposed Project.

5.4.1 Existing Conditions

Existing development within the project site consists of one groundwater monitoring well (OU1MW14), a former (now vacant) fire house, a paved taxiway and tarmac area associated with aviation uses, and various paved improvements located next to the existing taxiways, as shown in Figure 2-1, Existing Site Development. Although the project site contains some existing development, most of the site consists of vacant and undeveloped land, as shown on Figure 1-1, Project Site and Setting.

5.4.2 Alternative 1: No Project Alternative

Under Alternative 1, development of the Proposed Project would not occur as discussed in Chapter 2, Project Description, of this EIR. The project site would remain unchanged, and no development would occur. As a result, the proposed Zoning Designation, Plot Plan, and all other applicable pending approvals associated with the Proposed Project would not be necessary, because no new development would occur on the site that would require such actions.

5.4.2.1 Environmental Analysis

Aesthetics

As discussed in Section 3.1, Aesthetics, implementation of the Proposed Project would not result in the creation of a new source of substantial light or glare that would adversely affect day or nighttime views of the area. The project site is not an existing source of substantial light or glare due to the lack of development within the site, and the Proposed Project would introduce development and construction activity that would generate a source of light and glare. However, lighting associated with the Proposed Project would be of a similar nature and distribution as the lighting sources currently installed on warehouse and distribution facility properties in the surrounding area. Further, the proposed use of hoods or shields on all lighting fixtures, and the downward direction of all lighting sources, would also minimize the potential for outdoor lighting sources to produce glare that would be experienced by off-site viewers. In addition, the development plans would require installation of lighting fixtures with full cutoff fixtures and restriction of individual fixtures to not exceed 2,700 kelvin and 750 watts. With regard to glare, the proposed cargo building would feature non-reflective stucco-clad exterior walls and limited windows that would be located at the main building entrance and along the building's east elevation (near the main entrance), which would not be directed toward sensitive off-site ground-based receptors. As such, lighting and glare impacts would be less than significant.

Under Alternative 1, no development within the site would occur; thus, no change to the existing aesthetic condition would occur. Because no development would occur, there would not be any introduction of a new source of light or glare within the project site. Under this alternative, no building would occur. Because no development would occur, Alternative 1 would result in no impact. Thus, Alternative 1 would result in **no potential aesthetic impacts**, as compared to the Proposed Project's less-than-significant impacts.

Air Quality

As discussed in Section 3.2, Air Quality, implementation of the Proposed Project would result in construction emissions that do not exceed the South Coast Air Quality Management District (SCAQMD) regional construction thresholds. Incorporation of **MM-AQ-1** (Construction Management Plan), which requires that the Proposed Project use Tier 4 off-road-construction equipment, into the Proposed Project design and **MM-AQ-2** (Construction Requirements) would further reduce construction emissions and impacts would be less than significant with mitigation incorporated. Regional operational air quality impacts would be potentially significant, because the Proposed Project's daily regional emissions from ongoing non-peak and peak operations would exceed the thresholds of significance for emissions of volatile organic compounds (VOCs), oxides of nitrogen (NO_x), and carbon monoxide (CO). The exceedance of the regional operational thresholds for VOCs, NO_x, and CO are primarily due to the Proposed Project's flight operations. The Proposed Project would require implementation of **MM-AQ-3** (Improved Energy Efficiency and Water Reduction), **MM-AQ-4** (Truck Requirements), **MM-AQ-5** (Commute Trip Reduction), and **MM-AQ-6** (Additional Air Quality Tenant Requirements) to reduce the Proposed Project's operational VOC, NO_x, and

CO emissions; however, there is no meaningful way to quantify these reductions in the California Emissions Estimator Model (CalEEMod) and therefore no numeric emissions credits were taken in the analysis. Therefore, the Proposed Project's regional operational VOC, NO_x, and CO emissions would be significant and unavoidable. The Proposed Project would not result in an exceedance of SCAQMD's localized significance thresholds, would not cause a CO hotspot, and would not cause a toxic air contaminant health risk impact. Accordingly, impacts to sensitive receptors and those related to odors would be less than significant.

Under Alternative 1, no development within the project site would occur; thus, no change to the existing air quality conditions would occur. Because no construction activity would occur, no criteria air pollutant emissions due to the use of construction equipment would result under this alternative. In addition, because no development within the project site would occur, from an operational standpoint, no additional criteria air pollutant emissions would be generated beyond what may already be generated from existing operations within the site. Under this alternative, the site would remain in its existing conditions and would not be a source of, or otherwise generate, criteria air pollutants. Implementation of **MM-AQ-1** through **MM-AQ-6** would not be required, and implementation of this alternative would avoid the Proposed Project's significant and unavoidable air quality impacts. Thus, Alternative 1 would result in **no potential air quality impacts**, as compared to the Proposed Project's significant and unavoidable impacts.

Biological Resources

As discussed in Section 3.3, Biological Resources, implementation of the Proposed Project would result in less-than-significant biological resources impacts with implementation of **MM-BIO-1A** through **MM-BIO-5**. In regard to impacts to burrowing owls (*Athene cunicularia*), **MM-BIO-1A** (Burrowing Owl Avoidance and Minimization Measures) requires pre-construction survey buffers for occupied burrows, and monitoring during construction to ensure complete avoidance of the occupied burrows; **MM-BIO-1B** (Burrowing Owl Relocation and Mitigation Plan) requires the preparation of a Burrowing Owl Relocation and Mitigation Plan and habitat compensation for the loss of occupied habitat; and **MM-BIO-2** (Best Management Practices) establishes measures that require clearly marking work limits, restricting vehicle speed limits to 15 mph or less to minimize the generation of fugitive dust, providing pet restrictions, providing measures to ensure that trash and debris are disposed of properly to minimize short-term impacts of increased human activities; and the incorporation of native, non-invasive landscaping to minimize the spread of non-native invasive plant and animal species. In regard to impacts to San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), **MM-BIO-2** would be implemented, as would **MM-BIO-3** (San Diego Black-Tailed Jackrabbit Avoidance and Minimization Measures), which requires a pre-construction survey to be conducted 30 days prior to ground-disturbing activities and the demarcation and avoidance of active maternity dens during the pup-rearing season (February 15 through July 1). Impacts to California glossy snake (*Arizona elegans occidentalis*) would be mitigated through implementation of **MM-BIO-2**. Impacts to protected nesting birds would be mitigated through implementation of **MM-BIO-4** (Nesting Bird Avoidance and Minimization Measures), which requires nesting bird surveys of the Proposed Project's impact areas; if active nests are found, the biologist must establish buffers and/or implement monitoring to avoid impacting avian nesting success. Regarding impacts to jurisdictional waters, **MM-BIO-5** (Jurisdictional Waters Permitting and Regulatory Agency Permitting), which requires compensatory mitigation, applicable resource agency permits prior to Proposed Project implementation, that equipment and spoil sites are not placed within or adjacent to aquatic resources, and that pollutants be contained to prevent contamination of soils and/or waterways, would be implemented. Impacts to all other biological resources would be less than significant without the need for mitigation.

Under Alternative 1, no development within the project site would occur; thus, no grading or excavation within the site would occur. Because no grading or construction would occur, Alternative 1 would not have the potential to impact biological resources. Therefore, implementation of mitigation measures would not be required under this

alternative. Thus, Alternative 1 would result in **no potential impacts to biological resources**, as compared to the Proposed Project's less-than-significant impacts with mitigation incorporated.

Cultural Resources

As discussed in Section 3.4, Cultural Resources, buildout of the Proposed Project would result in less-than-significant impacts to archaeological resources with implementation of **MM-CUL-1** (Archaeological and Tribal Monitoring), which requires a tribal monitor during all initial ground-disturbing activities and development of a Cultural Resource Monitoring and Treatment Plan (CRMTP), and **MM-CUL-2** (Inadvertent Discovery of Archaeological Resources), which requires that all construction work occurring within 100 feet of a find to immediately stop until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology can evaluate the significance of the find. In addition, impacts related to the discovery of human remains would be less than significant with implementation of **MM-CUL-3** (Inadvertent Discovery of Human Remains), which requires handling in accordance with California Health and Safety Code (H&SC) Section 7050.5 and California Public Resources Code Section 5097.98. These impacts would thus be less than significant with mitigation incorporated, and impacts related to historical resources would be less than significant.

Under Alternative 1, no development within the project site would occur; thus, no grading or excavation within the site would occur. Because no grading or construction would occur, Alternative 1 would not have the potential to impact archaeological resources or disturb human remains. Therefore, implementation of **MM-CUL-1** through **MM-CUL-3** would not be required under this alternative. Thus, Alternative 1 would result in **no potential impacts to cultural resources**, as compared to the Proposed Project's less-than-significant impacts with mitigation incorporated.

Energy

As discussed in Section 3.5, Energy, construction and operation of the Proposed Project would result in less-than-significant impacts relating to wasteful, inefficient, or unnecessary consumption of energy resources. Mitigation for air quality (**MM-AQ-2** through **MM-AQ-5**) and greenhouse gas (GHG) emissions (**MM-GHG-1**), although its beneficial effects are not quantifiable with regard to energy and therefore are not included in the analysis, would provide co-benefits that would further reduce the demand for energy and minimize any potential impacts relating to conflict with or obstruction of state or local plans for renewable energy or energy efficiency. Impacts would remain less than significant.

Under Alternative 1, no development within the project site would occur; thus, no change to the existing energy usage conditions would occur. Thus, Alternative 1 would result in **no potential energy impacts**, as compared to the Proposed Project's less-than-significant impacts.

Geology and Soils

As discussed in Section 3.6, Geology and Soils, buildout of the Proposed Project would result in less-than-significant impacts through compliance with and implementation of the recommendations included in the project-specific Geotechnical Exploration Report (Appendix H). In addition, impacts related to paleontological resources would be less than significant with implementation of **MM-GEO-1** (Paleontological Monitoring Program), which requires monitoring for and recovery of any found paleontological resources.

Under Alternative 1, no development within the project site would occur; thus, no grading or construction within the site would occur. Because no development would occur, Alternative 1 would not directly or indirectly cause potential impacts to geology and soils, including the risk of loss, injury, or death involving strong seismic ground shaking and/or seismic-related ground failure, including liquefaction. Moreover, Alternative 1 would not result in a development that would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of Alternative 1, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. In addition, Alternative 1 would not result in a development that would be located on expansive soils. Lastly, Alternative 1 would not result in impacts to paleontological resources, because no ground-disturbing activity would occur. Thus, implementation of **MM-GEO-1** would not be required. Because no development would occur, Alternative 1 would result in **no potential impacts to geology and soils**, as compared to the Proposed Project's less-than-significant impacts with mitigation incorporated.

Greenhouse Gas Emissions

As discussed in Section 3.7, Greenhouse Gas Emissions, the Proposed Project would be consistent with Senate Bill (SB) 32, SB 375, and the County of Riverside's Climate Action Plan (CAP) with implementation of **MM-AQ-2** through **MM-AQ-6** and **MM-GHG-1** (Installation of EV Charging Stations). Therefore, the Proposed Project's GHG impacts would be less than significant with mitigation incorporated. For informational purposes, the annual GHG emissions associated with operation of the Proposed Project are estimated to be 23,054.04 metric tons of carbon dioxide equivalent (MT CO_{2e}) per year. Emission reductions from implementation of **MM-AQ-2** through **MM-AQ-6** are not readily quantifiable; therefore, no reduction in emissions was taken for those measures.

Under Alternative 1, no development within the project site would occur; thus, no change to the existing GHG emission conditions would occur. Because no construction activity would occur, no GHG emissions due to the use of construction equipment would result under this alternative. In addition, because no development would occur within the project site, from an operational emissions standpoint, no additional GHG emissions would be generated beyond what may already be generated from existing operations within the project site. With implementation of this alternative, the project site would remain in its existing condition, and would not be a new source of, or otherwise generate additional, operational GHG emissions. Implementation of **MM-AQ-2** through **MM-AQ-6** and **MM-GHG-1** would not be required. Thus, Alternative 1 would result in **no potential GHG impacts**, as compared to the Proposed Project's less-than-significant impacts with mitigation incorporated.

Hazards and Hazardous Materials

As discussed in Section 3.8, Hazards and Hazardous Materials, implementation of the Proposed Project would result in less-than-significant impacts associated with Proposed Project construction with implementation of **MM-HAZ-1** (Hazardous Materials Contingency Plan) and **MM-HAZ-2** (Stop Work, Groundwater Management). **MM-HAZ-1** requires the project applicant to develop a hazardous materials contingency plan (HMCP) that addresses the potential impacts to soil, soil vapor, and groundwater beneath the project site. Additionally, **MM-HAZ-1** requires the project applicant to submit the HMCP to the U.S. Environmental Protection Agency (EPA) Region IX and the state for review prior to commencement of construction and/or soil disturbance activities on Site 7. **MM-HAZ-2** requires work activities to cease should groundwater be encountered during excavation and/or construction activities. In addition, implementation of **MM-HAZ-3** (Wildlife Protective Measures) would require that protective measures (e.g., security fencing) be placed to secure contaminated areas and prevent a hazard to human health or the environment (including wildlife). Impacts relating to safety hazards for nearby residents or workers within an airport land use compatibility plan area would be less than significant; all other hazards-related impacts from the Proposed Project would be less than significant with mitigation incorporated.

Under Alternative 1, no development within the project site would occur; thus, no change to the existing setting regarding hazards and hazardous materials would occur. Because no construction activity would occur, **MM-HAZ-1** and **MM-HAZ-2** would not be required. In addition, because no development would occur within the project site under Alternative 1, no employees or persons would be subject to potential hazards or hazardous materials, and incorporation of **MM-HAZ-3** would not be required. Thus, Alternative 1 would result in no potential hazards and hazardous materials impacts, as compared to the Proposed Project's less-than-significant impacts with mitigation incorporated.

Hydrology and Water Quality

As discussed in Section 3.9, Hydrology and Water Quality, implementation of the Proposed Project would result in less-than-significant impacts associated with water quality standards and groundwater with implementation of **MM-HYD-1**, **MM-HAZ-1**, **MM-HAZ-2**, and **MM-AQ-6**, which require the following: incorporation of water quality BMPs into the Project design (**MM-HYD-1**); development of an HMCP and submitting it to EPA Region IX and to the state for approval prior to commencement of construction and/or soil disturbance activities on Site 7 (**MM-HAZ-1**); ceasing of work activities should groundwater be encountered during the course of Proposed Project construction and either management of contaminated groundwater or alteration of construction plans to avoid further contact with contaminated groundwater (**MM-HAZ-2**); and sweeping of the property monthly, including parking lot and truck court, to remove road dust, tire wear, brake dust, and other contaminants (**MM-AQ-6**). All other hydrology and water quality impacts would be less than significant, and overall hydrology and water quality impacts would be less than significant with mitigation incorporated.

Under Alternative 1, no development within the project site would occur; thus, no change to the existing setting regarding hydrology or water quality would occur. Because no construction activity would occur, **MM-HYD-1**, **MM-HAZ-1**, **MM-HAZ-2**, and **MM-AQ-6** would not be required. Because no development would occur, Alternative 1 would result in **no potential impacts to hydrology and water quality**, as compared to the Proposed Project's less-than-significant impacts with mitigation incorporated.

Land Use and Planning

As discussed in Section 3.10, Land Use and Planning, construction and operation of the Proposed Project would result in less-than-significant land use and planning impacts with incorporation of **MM-LU-1** (Occupancy Limits) and implementation of mitigation measures related to air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, and noise.

Under Alternative 1, no development within the project site would occur; thus, no change to the existing land use and planning setting would occur. Therefore, Alternative 1 would not result in any land use and planning impacts, and incorporation of **MM-LU-1**, as well as implementation of the mitigation measures related to air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, and noise, would not be required. As such, Alternative 1 would result in **no potential land use and planning impacts**, as compared to the Proposed Project's less-than-significant impacts with mitigation incorporated.

Noise

As discussed in Section 3.11, Noise, once operational, the Proposed Project would result in less-than-significant impacts associated with exposure of workers to excessive noise relating to potential aircraft noise levels within the cargo building, with implementation of **MM-NOI-1** (Construction Worker Hearing Protection). **MM-NOI-1** requires the

project applicant to provide evidence that the subject plans contain requirements with respect to contractor(s) providing employees with personal protective equipment per Title 8 of the California Code of Regulations (CCR), Section 5096, and Occupational Safety and Health Administration (OSHA) information (e.g., Publication 3498). The cargo aircraft flight operations of the Proposed Project would result in an increase in the ambient noise environment. Noise impacts due to Proposed Project aircraft operations would be **significant and unavoidable** even with the application of feasible mitigation, **MM-NOI-2** (Future Tenant Aircraft Fleet), which requires that, prior to issuance of a certificate of occupancy, a noise analysis be provided confirming that the proposed tenant's aircraft fleet mix would not exceed the noise levels disclosed in this EIR; absent such documentation, additional environmental review is required. Therefore, noise impacts due to Proposed Project aircraft operations would be significant and unavoidable even with the application of feasible mitigation. The Proposed Project would have less than significant impacts related to potential sleep disturbance from nighttime aircraft operations.

Under Alternative 1, the No Project Alternative, no development would occur within the project site or work areas; therefore, no construction, operation, or traffic noise would be generated or contribute to increases in ambient noise levels in the surrounding area. Additionally, under Alternative 1, no flight operations would occur; as such, the Proposed Project would not contribute to aircraft noise levels generated by airport operations at MIP Airport. Therefore, Alternative 1 would result in **no potential noise impacts**, as compared to the Proposed Project's significant and unavoidable impacts.

Transportation

As discussed in Section 3.12, Transportation, construction of the Proposed Project would result in vehicle miles traveled (VMT) per employee of 23.12, which is below the Western Riverside Council of Governments (WRCOG) significance threshold of 25.47 VMT per employee (approximately 9.23% below the threshold). Therefore, the Proposed Project's VMT impact would be less than significant. All other transportation-related impacts would be less than significant or less than significant with mitigation incorporated. In addition, the Proposed Project incorporates Project Design Feature (PDF) **TRA-1** (Payment of Fair-Share Cost) and would include implementation of **MM-TRA-1** (Construction Traffic Management Plan) and **MM-TRA-2** (Project Truck Route on Heacock Street). **PDF-TRA-1** requires the Proposed Project to contribute its fair share toward intersection improvement measures. **MM-TRA-1** requires the applicant to develop and implement a project-specific Construction Traffic Management Plan (CTMP) approved by March JPA, and **MM-TRA-2** requires all Proposed Project truck traffic to utilize the Harley Knox Boulevard interchange at I-215 and the designated truck routes to the south of the project site. Overall transportation impacts under the Proposed Project would be less than significant with mitigation incorporated.

Under Alternative 1, no development within the project site would occur; thus, no employee vehicle trips would be generated. Alternative 1 would not exceed 15% below existing regional VMT per employee. Thus, Alternative 1 would result in **no potential transportation impacts**, a significant reduction compared to the Proposed Project's less-than-significant impacts with mitigation incorporated.

Tribal Cultural Resources

As discussed in Section 3.13, Tribal Cultural Resources, buildout of the Proposed Project would result in less-than-significant impacts to tribal cultural resources (TCRs) with implementation of **MM-CUL-1** (Archaeological and Tribal Monitoring), which requires the project applicant/developer to retain a qualified tribal monitor to monitor all initial ground-disturbing activities. **MM-CUL-1** also requires the Proposed Project's qualified archaeological Principal Investigator to develop a CRMTP prior to Proposed Project commencement. Impacts related to TCRs that are listed or eligible for listing in the California Register of Historical Resources (CRHR) or in a local register of

historical resources as defined in California Public Resources Code Section 5020.1(k) would be less than significant with mitigation incorporated.

Under Alternative 1, no development within the project site would occur; thus, no grading or excavation would occur. Because no grading or construction would occur, implementation of **MM-CUL-1** would not be required under this alternative. Thus, Alternative 1 would result in **no potential impacts to TCRs**, as compared to the Proposed Project’s less-than-significant impacts with mitigation incorporated.

Utilities and Service Systems

As discussed in Section 3.14, Utilities and Service Systems, the Proposed Project would have less-than-significant impacts to facilities providing water, wastewater, stormwater, electric power, natural gas, and telecommunications. There are sufficient water supplies available and wastewater treatment capacity to serve the Proposed Project, resulting in less-than-significant impacts. The Proposed Project would have no impact on solid waste infrastructure and capacity and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, resulting in less-than-significant impacts. Therefore, the Proposed Project’s impacts to utilities and service systems would be less than significant and no mitigation is required.

Under Alternative 1, no development within the project site would occur; thus, no change to the existing setting regarding utilities and service systems occur. Thus, Alternative 1 would result in **no potential impacts to utilities and service systems**, as compared to the Proposed Project’s less-than-significant impacts.

5.4.2.2 Project Objectives

Under Alternative 1, development of the Proposed Project would not occur as discussed in Chapter 2 of this EIR. The project site would remain unchanged, and no development activity would occur. As a result, the proposed Zoning Designation, Plot Plan, and all other applicable pending approvals associated with the Proposed Project would not be necessary, because no new development would occur on the project site that would require such actions. Table 5-2 provides a list of the project objectives and whether Alternative 1 meets each objective. As demonstrated in this table, Alternative 1 would not meet the majority of the project objectives.

Table 5-2. Alternative 1 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
More fully utilize the operations capacity of the March Inland Port Airport to meet regional demands for air cargo services within Southern California and the greater region, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region.	No. As discussed in the environmental analysis above, no development would occur under Alternative 1. Thus, no additional aviation operations would occur that would allow MIP Airport to meet regional demands for air cargo services. Because no additional air cargo facilities would be constructed, and no increase in capacity to handle air cargo demands would occur, Alternative 1 would not alleviate congestion or overtaxed air and roadway facilities within the greater region. As such, Alternative 1 would not achieve this project objective.
Provide appropriate land use intensities to comply with the parameters of the March Air Reserve Base/Inland Port Airport Compatibility Plan.	Yes. As discussed in the environmental analysis above, no development would occur under Alternative 1, leaving the project site in its existing state. The project site, in its undeveloped state, would comply with the parameters of the March ARB/Inland Port ALUCP. As such, Alternative 1 would achieve this project objective.

Table 5-2. Alternative 1 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
Avoid impacts to, or impediment of, the remediation of the burn areas within Site 7.	Yes. As discussed in the environmental analysis above, no development would occur under Alternative 1; therefore, impacts to the burn areas of Site 7 would be avoided.
Provide increased job opportunities for local residents through the provision of employment-generating businesses.	No. As discussed in the environmental analysis above, no development would occur under Alternative 1, and would therefore not provide increased employment opportunities through the provision of employment-generating businesses. As such, Alternative 1 would not achieve this project objective.
Improve access for airport users to the existing taxiways.	No. As discussed in the environmental analysis above, no development would occur under Alternative 1. Thus, no taxiway improvements would occur under this alternative, and access to the existing taxiways within MIP Airport would not be improved. As such, Alternative 1 would not achieve this project objective.
Facilitate development of aviation uses other than federal military aviation.	No. As discussed in the environmental analysis above, no development would occur under Alternative 1. Thus, no development of aviation uses would occur within the project site. As such, Alternative 1 would not achieve this project objective.

Notes: MIP = March Inland Port; ARB = Air Reserve Base; ALUCP = Airport Land Use Compatibility Plan.

5.4.3 Alternative 2: Nighttime Flight Noise Reduction Alternative

Under Alternative 2, the Nighttime Flight Noise Reduction Alternative, buildout of the project site would occur in an identical manner to the Proposed Project. Thus, Alternative 2 would result in the development of the Air Cargo Center Component and the Off-Site Component, as discussed in Chapter 2, Project Description. The cargo building and all proposed taxiway and aircraft parking apron improvements, utility improvements, landscaping, and internal driveways/parking lots, as well as the work within the right-of-way along Heacock Street, would be constructed in the exact same manner as the Proposed Project. In addition, all off-site work planned under the Proposed Project, including the work to be completed in Work Areas 1–5, would occur under this alternative.

The operational aspects of the cargo building would remain the same as those identified for the Proposed Project. Regarding flight operations, once constructed, Alternative 2 would average 17 flights per day, and flights would occur 6 days a week, the same as the Proposed Project. During the end-of-the-year holiday season, Alternative 2 would average 22 flights per day, 6 days per week, the same as the Proposed Project. However, under Alternative 2, no flight operations would occur between 10:00 p.m. and 11:00 p.m. (approximately 5% of the Proposed Project's flight operations). Thus, flight operations under Alternative 2 would occur only from 7:00 a.m. to 10:00 p.m.

5.4.3.1 Environmental Analysis

Aesthetics

As discussed in Section 3.1, Aesthetics, implementation of the Proposed Project would not result in the creation of a new source of substantial light or glare that would adversely affect day or nighttime views of the area. The project site is not an existing source of substantial light or glare due to the lack of development within the site, and the Proposed Project would introduce development and construction activity that would generate a source of light and glare. However, lighting associated with the Proposed Project would be of a similar nature and distribution as the

lighting sources currently installed on warehouse and distribution facility properties in the surrounding area. Further, the proposed use of hoods or shields on all lighting fixtures, and the downward direction of all lighting sources, would also minimize the potential for outdoor lighting sources to produce glare that would be experienced by off-site viewers. In addition, the installation of lighting fixtures with full cutoff fixtures and restriction of individual fixtures to not exceed 2,700 kelvin and 750 watts is included in the development plans. With regard to glare, the proposed cargo building would feature non-reflective stucco-clad exterior walls and limited windows that would be located at the main building entrance and along the building's east elevation (near the main entrance) that would not be directed toward sensitive off-site ground-based receptors. Therefore, based on the rationale provided above, lighting and glare impacts would be less than significant.

Under Alternative 2, the project site would be developed in the same manner as the Proposed Project. Thus, Alternative 2 would contribute additional lighting to the area through the construction and operation of an air cargo center within the site, as well as through aircraft flight operations after sundown. Similar to the Proposed Project, development under this alternative would generate construction light and glare, and the applicant would be required to submit Form 7460-1, Notice of Proposed Construction or Alteration, to FAA. With submittal of this form and completion of a review of the proposed construction and alteration by FAA (and identification of needed temporary lighting measures), in conjunction with the short duration and assumed infrequency of necessary nighttime construction, Construction of this alternative would not create a new source of substantial light or glare that would adversely affect day- or nighttime views in the area, resulting in a less-than-significant impact, the same as the Proposed Project. Regarding operational light and glare impacts, Alternative 2 would implement development plans to ensure that operational light and glare impacts would be less than significant, the same as the Proposed Project. Lastly, regarding March ARB taxiway lighting impacts, because Alternative 2 would result in the same alterations to the existing Taxiways A and G within March ARB, the project applicant would be required to submit FAA Form 7460-1, and because any new lighting constructed within Taxiways A, C, and G would be similar to and consistent with the existing March ARB lighting surrounding the project site, Alternative 2 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. However, because no flight operations would occur between 10:00 p.m. and 11:00 p.m., Alternative 2 would result in less overall lighting and potential glare associated with aircraft operations. Still, impacts would be less than significant, the same as the Proposed Project. Thus, Alternative 2 would result in **less-than-significant impacts** that would be slightly reduced compared to the Proposed Project's less-than-significant impacts.

Air Quality

As discussed in Section 3.2, Air Quality, implementation of the Proposed Project would result in construction emissions that do not exceed the SCAQMD regional construction thresholds. Implementation of **MM-AQ-1** (Construction Management Plan), which requires the Proposed Project to use Tier 4 off-road-construction equipment, and **MM-AQ-2** (Construction Requirements) would further reduce construction emissions and impacts would remain less than significant. Regional operational air quality impacts would be potentially significant, as the Proposed Project's daily regional emissions from ongoing non-peak and peak operations would exceed the thresholds of significance for emissions of VOCs, NO_x, and CO. The exceedance of the regional operational thresholds for VOCs, NO_x, and CO would be primarily due to the Proposed Project's flight operations. The project applicant would implement **MM-AQ-1** through **MM-AQ-6** to reduce the Proposed Project's operational VOC, NO_x, and CO emissions; however, there is no meaningful way to quantify these reductions in CalEEMod; therefore, no numeric emissions credit was taken in the analysis. Therefore, the Proposed Project's regional operational VOC, NO_x, and CO emissions would be significant and unavoidable. The Proposed Project would not result in an exceedance of SCAQMD's localized significance thresholds, would not cause a CO hotspot, and would not cause a toxic air

contaminant health risk impact. Accordingly, impacts to sensitive receptors and those related to odors would be less than significant.

Construction of Alternative 2 would result in the same less-than-significant construction air quality emissions generated as those identified for the Proposed Project. Alternative 2 would incorporate **MM-AQ-1** and **MM-AQ-2**, which would further reduce construction emissions, the same as the Proposed Project. Regarding operational air quality impacts, criteria area pollutant emission levels would be the same as those generated by the Proposed Project, as the operational aspects that would generate criteria air pollutant emissions would be the same as the Proposed Project, which includes area, energy, and mobile source emissions, as well as on-site equipment source emissions and aircraft source emissions. Alternative 2 would also include implementation of **MM-AQ-1** through **MM-AQ-6** to reduce Alternative 2's operational VOC, NO_x, and CO emissions. The only operational change between Alternative 2 and the Proposed Project would be the hours that flights occur. The same number of annual flights would occur under Alternative 2 as the Proposed Project. Therefore, Alternative 2 would result in the **same level of air quality impacts** as the Proposed Project.

Biological Resources

As discussed in Section 3.3, Biological Resources, implementation of the Proposed Project would result in less-than-significant biological resources impacts with implementation of **MM-BIO-1A** through **MM-BIO-5**. In regard to impacts to burrowing owls, **MM-BIO-1A** (Burrowing Owl Avoidance and Minimization Measures) requires pre-construction surveys buffers for occupied burrows, and monitoring during construction to ensure complete avoidance of the occupied burrows; **MM-BIO-1B** (Burrowing Owl Relocation and Mitigation Plan) requires the preparation of a Burrowing Owl Relocation and Mitigation Plan and habitat compensation for the loss of occupied habitat; and **MM-BIO-2** (Best Management Practices) establishes measures that require clearly marking work limits; restricting vehicle speed limits to 15 mph or less to minimize the generation of fugitive dust; providing pet restrictions; providing measures to ensure that trash and debris are disposed of properly to minimize short-term impacts of increased human activities; and the incorporation of native, non-invasive landscaping to minimize the spread of non-native invasive plant and animal species. In regard to impacts to San Diego black-tailed jackrabbit, **MM-BIO-2** would be implemented, as would **MM-BIO-3** (San Diego Black-Tailed Jackrabbit Avoidance and Minimization Measures), which requires a pre-construction survey to be conducted 30 days prior to ground-disturbing activities and the demarcation and avoidance of active maternity dens during the pup-rearing season (February 15 through July 1). Impacts to the California glossy snake would be mitigated through implementation of **MM-BIO-2**. Impacts to protected nesting birds would be mitigated through implementation of **MM-BIO-4** (Nesting Bird Avoidance and Minimization Measures), which requires nesting bird surveys of impact areas; if active nests are found, the biologist must establish buffers and/or implement monitoring to avoid impacting avian nesting success. Regarding impacts to jurisdictional waters, **MM-BIO-5** (Jurisdictional Waters Permitting and Regulatory Agency Permitting), which requires compensatory mitigation, that applicable resource agency permits are received prior to Proposed Project implementation, that equipment and spoil sites are not placed within or adjacent to aquatic resources, and that pollutants be contained to prevent contamination of soils and/or waterways, would be implemented. Impacts to all other biological resources would be less than significant without the need for mitigation.

Under Alternative 2, development within the project site would occur in the same manner as the Proposed Project. Grading and construction activity would occur within the exact same footprint as the Proposed Project, and all operational aspects that would impact biological resources would be the same as the Proposed Project. Therefore, implementation of **MM-BIO-1A** through **MM-BIO-5** would be required, which would result in biological resource impacts that would be less than significant with mitigation incorporated, the same as the Proposed Project. Thus, implementation of Alternative 2 would result in **the same level of biological resources impacts** as the Proposed Project.

Cultural Resources

As discussed in Section 3.4, Cultural Resources, buildout of the Proposed Project would result in less-than-significant impacts to archaeological resources with implementation of **MM-CUL-1** (Archaeological and Tribal Monitoring), which requires a tribal monitor during all initial ground-disturbing activities and development of a CRMP, and **MM-CUL-2** (Inadvertent Discovery of Archaeological Resources), which requires that all construction work occurring within 100 feet of a find to immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find. In addition, impacts related to the discovery of human remains would be less than significant with implementation of **MM-CUL-3** (Inadvertent Discovery of Human Remains), which requires handling in accordance with H&SC Section 7050.5 and California Public Resources Code Section 5097.98. Impacts related to historical resources would be less than significant.

Under Alternative 2, development within the project site would occur in the same manner as the Proposed Project, in that the Air Cargo Component and Off-Site Component under this alternative would be constructed within the same footprint as that planned for the Proposed Project. No grading or excavation activity would be proposed under Alternative 2 that would exceed the boundary of areas previously analyzed for potential cultural resource impacts. Because grading and excavation would occur under Alternative 2, implementation of **MM-CUL-1** through **MM-CUL-3** would be required, which would ensure that impacts would be reduced to less than significant. Alternative 2 would not result in the potential to impact historical resources, as development would occur within the same footprint as that for the Proposed Project and would therefore not have the potential to disturb historical resources, the same as the Proposed Project. Impacts would be less than significant with mitigation incorporated, the same as the Proposed Project. Thus, Alternative 2 would result in **the same level of cultural resources impacts** as the Proposed Project.

Energy

As discussed in Section 3.5, Energy, construction and operation of the Proposed Project would result in less-than-significant impacts relating to wasteful, inefficient, or unnecessary consumption of energy resources. Mitigation for air quality (**MM-AQ-2** through **MM-AQ-5**) and GHG emissions (**MM-GHG-1**), although its beneficial effects are not quantifiable with regard to energy and therefore are not included in the analysis, would provide co-benefits that would further reduce the demand for energy and minimize any potential energy impacts relating to conflict with or obstruction of state or local plans for renewable energy or energy efficiency. Impacts would remain less than significant.

Under Alternative 2, the project site would be built out in the same manner as the Proposed Project, and operation of energy-consuming infrastructure, vehicles, and aircraft would occur in the same manner as the Proposed Project. Alternative 3 would also implement **MM-AQ-2** through **MM-AQ-5** and **MM-GHG-1**. No change in operation of the Proposed Project, except for a smaller flight time window (no flights between 10:00 p.m. and 11:00 p.m.), would occur. Because Alternative 2 would be constructed in the same manner as the Proposed Project and operations would be the same as the Proposed Project, impacts would be less than significant, the same as the Proposed Project. Therefore, Alternative 2 would result in **the same level of energy impacts** as the Proposed Project.

Geology and Soils

As discussed in Section 3.6, Geology and Soils, buildout of the Proposed Project would result in less-than-significant impacts with through compliance with and implementation of the recommendations included in the project-specific Geotechnical Exploration Report (Appendix H). In addition, impacts related to paleontological resources would be

less than significant with implementation of **MM-GEO-1** (Paleontological Monitoring Program), which requires monitoring for and recovery of any found paleontological resources.

Under Alternative 2, development within the project site would occur in the same manner as the Proposed Project, in that the cargo building and all work to be completed within the project site and the off-site work areas would be constructed within the same footprint and in the same design as that planned for the Proposed Project. No grading or construction activity would be proposed under Alternative 2 that would exceed the boundary of areas previously analyzed, and all structures constructed within the project site and off-site work areas would be subject to compliance with the geotechnical recommendations contained in the Geotechnical Exploration Report for the Proposed Project (Appendix H). Through implementation of the geotechnical recommendations contained in the Geotechnical Exploration Report, impacts related to seismic ground shaking/seismic-related ground failure, liquefaction, liquefaction-induced lateral spreading, dry dynamic settlement, soil collapse/settlement, and expansive soils would be less than significant, the same as the Proposed Project. Regarding paleontological resources, because grading and excavation would occur under Alternative 2 in the same manner as that planned by the Proposed Project and would occur within the same footprint as that for the Proposed Project, implementation of **MM-GEO-1** would be required, which would ensure that impacts to paleontological resources would be reduced to less than significant. Alternative 2 would not have the potential to disturb paleontological resources beyond what was analyzed for the Proposed Project. Impacts to geology and soils would be less than significant with mitigation incorporated, the same as the Proposed Project. Thus, Alternative 2 would result in the **same level of geology and soils impacts** as the Proposed Project.

Greenhouse Gas Emissions

As discussed in Section 3.7, Greenhouse Gas Emissions, the Proposed Project would be consistent with SB 32, SB 375, and the County of Riverside's CAP with implementation of **MM-AQ-2** through **MM-AQ-6** and **MM-GHG-1** (Installation of EV Charging Stations). Therefore, the Proposed Project's GHG impacts would be less than significant with mitigation incorporated. For informational purposes, the annual GHG emissions associated with operation of the Proposed Project are estimated to be 23,054.04 MT CO₂e per year. Emission reductions from implementation of **MM-AQ-2** through **MM-AQ-6** are not readily quantifiable; therefore, no reduction in emissions was taken for those measures.

Under Alternative 2, the project site would be built out in the same manner as the Proposed Project, and operation of GHG-emitting infrastructure, vehicles, and aircraft would occur in the same manner as the Proposed Project. No change in operation of the Proposed Project, except for a smaller flight time window (no flights between 10:00 p.m. and 11:00 p.m.), would occur. **MM-AQ-2** through **MM-AQ-6** and **MM-GHG-1** would be implemented under Alternative 2. Alternative 2 would be consistent with SB 32, SB 375, and the County of Riverside's CAP with implementation of **MM-AQ-2** through **MM-AQ-6** and **MM-GHG-1** and impacts would be less than significant with mitigation incorporated, the same as the Proposed Project. Because Alternative 2 would be constructed in the same manner as the Proposed Project, and operations would be the same as the Proposed Project, GHG emissions would occur at the same level as the Proposed Project. Therefore, Alternative 2 would result in the **same level of GHG emissions impacts** as the Proposed Project.

Hazards and Hazardous Materials

As discussed in Section 3.8, Hazards and Hazardous Materials, implementation of the Proposed Project would result in less-than-significant impacts associated with Proposed Project construction with implementation of **MM-HAZ-1** (Hazardous Materials Contingency Plan) and **MM-HAZ-2** (Stop Work, Groundwater Management).

MM-HAZ-1 requires the project applicant to develop an HMCP that addresses the potential impacts to soil, soil vapor, and groundwater beneath the project site. Additionally, **MM-HAZ-1** requires the project applicant to submit the HMCP to the EPA Region IX and the state for review prior to commencement of construction and/or soil disturbance activities on Site 7. **MM-HAZ-2** requires work activities to cease should groundwater be encountered during excavation and/or construction activities. In addition, implementation of **MM-HAZ-3** (Wildlife Protective Measures) would require that protective measures (e.g., security fencing) be placed to secure contaminated areas and prevent a hazard to human health or the environment (including wildlife). Impacts relating to safety hazards or excessive noise for nearby residents or workers within an airport land use compatibility plan area would be less than significant; all other hazards-related impacts from the Proposed Project would be less than significant with mitigation incorporated.

Under Alternative 2, development within the project site would occur in the same manner as the Proposed Project, in that the cargo building and all work to be completed within the project site and the off-site work areas would be constructed within the same footprint and in the same design as that planned for the Proposed Project. Demolition of existing structures, such as the tarmac, would occur in the same manner as the Proposed Project. No grading or excavation would be proposed under this alternative that would exceed the boundary of areas previously analyzed for potential hazards and hazardous material impacts. During construction of Alternative 2, a variety of hazardous materials would be transported, stored, and used during construction activities, which would be the same as those used during construction of the Proposed Project. Any handling, transport, use, or disposal would comply with all applicable federal, state, and local regulations (as listed in Section 3.8.2 of the EIR), the same as the Proposed Project. Moreover, implementation of **MM-HAZ-1** and **MM-HAZ-2** would be required during construction and operation of Alternative 2, which would ensure that potential impacts associated with exposure to soil, soil vapor, and groundwater beneath the project site would be less than significant with mitigation incorporated. In addition, Alternative 2 would incorporate **MM-HAZ-3**. Thus, Alternative 2 would result in **the same level of hazards and hazardous material impacts** as the Proposed Project.

Hydrology and Water Quality

As discussed in Section 3.9, Hydrology and Water Quality, implementation of the Proposed Project would result in less-than-significant impacts associated with water quality standards and groundwater with implementation of **MM-HYD-1**, **MM-HAZ-1**, **MM-HAZ-2**, and **MM-AQ-6**, which require the following: incorporation of water quality BMPs into the Project design (**MM-HYD-1**); development of an HMCP and submitting it to EPA Region IX and to the state for approval prior to commencement of construction and/or soil disturbance activities on Site 7 (**MM-HAZ-1**); ceasing of work activities should groundwater be encountered during the course of Proposed Project construction and either management of contaminated groundwater or alteration of construction plans to avoid further contact with contaminated groundwater (**MM-HAZ-2**); and sweeping of the property monthly, including parking lot and truck court, to remove road dust, tire wear, brake dust, and other contaminants (**MM-AQ-6**). All other hydrology and water quality impacts would be less than significant, and overall hydrology and water quality impacts would be less than significant with mitigation incorporated.

Under Alternative 2, development within the project site would occur in the same manner as the Proposed Project, in that the cargo building and all work to be completed within the project site and the off-site work areas would be constructed within the same footprint and in the same design as that planned for the Proposed Project. No grading or excavation activity are proposed under Alternative 2 that would exceed the boundary of areas previously analyzed for potential hydrology and water quality impacts. Therefore, any grading and change to the existing hydrological setting would occur in the same manner as the Proposed Project. Thus, implementation of **MM-HYD-1**, **MM-HAZ-1**, **MM-HAZ-2**, and **MM-AQ-6** would be required. With implementation of these measures, impacts would be reduced

to less than significant with mitigation incorporated, the same as the Proposed Project. Therefore, Alternative 2 would result in **the same level of hydrology and water quality impacts** as the Proposed Project.

Land Use and Planning

As discussed in Section 3.10, Land Use and Planning, construction and operation of the Proposed Project would result in less-than-significant land use and planning impacts with implementation of mitigation measures related to air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, and noise. Incorporation of **MM-LU-1** (Occupancy Limits) would also avoid or minimize land use and planning impacts.

Under Alternative 2, development within the project site would occur in the same manner as the Proposed Project, in that the cargo building and all work to be completed within the project site and the off-site work areas would be constructed within the same footprint and in the same design as that planned for the Proposed Project. No change in operation of the Proposed Project, except for a smaller flight time window (no flights between 10:00 p.m. and 11:00 p.m.), would occur. Alternative 2 would include incorporation of **MM-LU-1**, as well as implementation of mitigation measures related to air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, and noise. Alternative 2's impacts would be less than significant with mitigation incorporated. As such, Alternative 2 would result in the **same level of land use and planning impacts** as the Proposed Project.

Noise

As discussed in Section 3.11, Noise, once operational, the Proposed Project would result in less-than-significant impacts associated with exposure of workers to excessive noise relating to potential aircraft noise levels within the cargo building, with implementation of **MM-NOI-1** (Construction Worker Hearing Protection). **MM-NOI-1** requires the project applicant to provide evidence that the subject plans contain requirements with respect to contractor(s) providing employees with personal protective equipment per 8 CCR, Section 5096, and OSHA information (e.g., Publication 3498). The cargo aircraft flight operations of the Proposed Project would result in an increase in the ambient noise environment. Noise impacts due to Proposed Project aircraft operations would be **significant and unavoidable** even with the application of feasible mitigation, **MM-NOI-2** (Future Tenant Aircraft Fleet), which requires that prior to issuance of a certificate of occupancy a noise analysis be provided confirming the proposed tenant's aircraft fleet mix would not exceed the noise levels disclosed in this EIR; absent such documentation, additional environmental review is required. Therefore, noise impacts due to Proposed Project's aircraft operations would be significant and unavoidable even with the application of feasible mitigation. The Proposed Project would have less than significant impacts related to potential sleep disturbance from nighttime aircraft operations.

Under Alternative 2, the Nighttime Flight Noise Reduction Alternative, buildout of the project site would occur in an identical manner to the Proposed Project, in that the Air Cargo Center Component and all proposed taxiway, taxilane, and aircraft parking apron improvements; utility improvements; landscaping; and internal roadways/parking lots would be constructed in the exact same manner as the Proposed Project and would require implementation of **MM-NOI-1**. The operational aspects would remain the same as those identified for the Proposed Project except that no flight operations would occur during nighttime hours (10:00 p.m. to 7:00 a.m.), which would typically take place between 10:00 p.m. and 11:00 p.m. (approximately 5% of the Proposed Project's flight operations). Because flight operations would be limited to the hours between 7:00 a.m. and 10:00 p.m., Alternative 2 would have no potential impact associated with sleep disturbance between the hours of 10:00 p.m. and 7:00 a.m. The noise level reduction obtained by eliminating the 5% of the operations that would occur at night would result in a change of approximately -1 decibel (dB) at noise-sensitive receptors with the greatest exposure to the air cargo flight operations. However, the

noise level increase that would occur under Alternative 2 would still exceed the relative increase thresholds and would remain a significant and unavoidable noise impact. Therefore, **MM-NOI-2** would also be implemented under Alternative 2, but impacts would remain **significant and unavoidable**, similar to the Proposed Project. Because Alternative 2 would have no potential sleep disturbance impact and a reduced noise level increase due to aircraft operations, Alternative 2 would result in a **reduced level of noise impacts** compared to the Proposed Project.

Transportation

As discussed in Section 3.12, Transportation, construction of the Proposed Project would result in VMT per employee of 23.12, which is below the WRCOG significance threshold of 25.47 VMT per employee (approximately 9.23% below the threshold). Therefore, the Proposed Project's VMT impact would be less than significant. All other transportation-related impacts would be less than significant or less than significant with mitigation incorporated. In addition, the Proposed Project would incorporate **PDF-TRA-1** (Payment of Fair-Share Cost) and would require implementation of **MM-TRA-1** (Construction Traffic Management Plan) and **MM-TRA-2** (Project Truck Route on Heacock Street). **PDF-TRA-1** requires the Proposed Project to contribute its fair share toward intersection improvement measures. **MM-TRA-1** requires the applicant to develop and implement a project-specific CTMP approved by March JPA, and **MM-TRA-2** requires all Proposed Project truck traffic to utilize the Harley Knox Boulevard interchange at I-215 and the designated truck routes to the south of the project site. Overall transportation impacts under the Proposed Project would be less than significant with mitigation incorporated.

Under Alternative 2, the project site would be built out in the same manner as the Proposed Project, requiring the same amount of employee trips and truck trips to and from the project site. Thus, the trip generation and operation of the cargo building under Alternative 2 would be the same as the Proposed Project. As such, Alternative 2's impact based on VMT would be less than significant, the same as the Proposed Project. In addition, Alternative 2 would also incorporate **PDF-TRA-1**, **MM-TRA-1**, and **MM-TRA-2**. Therefore, Alternative 2 would result in the **same level of transportation impacts** as the Proposed Project.

Tribal Cultural Resources

As discussed in Section 3.13, Tribal Cultural Resources, buildout of the Proposed Project would result in less-than-significant impacts to TCRs with implementation of **MM-CUL-1** (Archaeological and Tribal Monitoring), which requires the project applicant/developer to retain a qualified tribal monitor to monitor all initial ground-disturbing activities. **MM-CUL-1** also requires the Proposed Project's qualified archaeological Principal Investigator to develop a CRMTP prior to Proposed Project commencement. Impacts related to TCRs that are listed or eligible for listing in the CRHR or in a local register of historical resources as defined in California Public Resources Code Section 5020.1(k) would be less than significant with mitigation incorporated.

Under Alternative 2, development within the site would occur in the same manner as that proposed by the Project; thus, grading and excavation activities within the site would occur, resulting in the potential to impact TCRs. Therefore, implementation of **MM-CUL-1** would be required. With implementation of **MM-CUL-1**, Alternative 2 would result in a less-than-significant impact with mitigation incorporated, the same as the Proposed Project. Thus, Alternative 2 would result in the **same level of impacts to TCRs** as the Proposed Project.

Utilities and Service Systems

As discussed in Section 3.14, Utilities and Service Systems, the Proposed Project would have less-than-significant impacts to facilities providing water, wastewater, stormwater, electric power, natural gas, and telecommunications. There are sufficient water supplies available and wastewater treatment capacity to serve the Proposed Project, resulting in less-than-significant impacts. The Proposed Project would have no impact on solid waste infrastructure and capacity and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, resulting in less-than-significant impacts. Therefore, the Proposed Project’s impacts to utilities and service systems would be less than significant and no mitigation is required.

Under Alternative 2, development within the project site would occur in the same manner as that planned for the Proposed Project; thus, Alternative 2 would result in less-than-significant impacts related to facilities providing water, wastewater, stormwater, electric power, natural gas, and telecommunications. Alternative 2 would require the same level of water and wastewater treatment capacity as the Proposed Project. In addition, Alternative 2 would result in the same amount of solid waste generated during the construction and grading process and the operation of the Proposed Project, because the development of the site and the number of employees would be the same as the Proposed Project, thereby resulting in less-than-significant impacts relating to solid waste. Alternative 2 would result in a less-than-significant impact, the same as the Proposed Project. Thus, Alternative 2 would result in the **same level of impacts to utilities and service systems** as the Proposed Project.

5.4.3.2 Project Objectives

Under Alternative 2, the project site would be built out in the same manner as the Proposed Project. The only operational difference between this alternative and the Proposed Project is that under this alternative, no flight operations would occur between 10:00 p.m. and 11:00 p.m. (approximately 5% of the Proposed Project’s flight operations). Table 5-3 provides a list of the project objectives and whether Alternative 2 meets each objective. As discussed in this table, Alternative 2 would meet all project objectives.

Table 5-3. Alternative 2 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
More fully utilize the operations capacity of the March Inland Port Airport to meet regional demands for air cargo services within Southern California and the greater region, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region.	Yes. Development of this alternative would result in the provision of additional air cargo operations that would more fully utilize the operations capacity of MIP Airport to meet regional demands for air cargo services within Southern California and the greater region. This alternative would result in the same amount of annual flight operations as the Proposed Project; thus, this alternative would achieve this project objective.
Provide appropriate land use intensities to comply with the parameters of the March Air Reserve Base/Inland Port Airport Compatibility Plan.	Yes. As discussed in the environmental analysis above, the project site would be constructed in the same manner to that proposed by the Proposed Project and would provide a land use (aviation) that is consistent with the allowed uses of the March ARB/Inland Port ALUCP. Alternative 2 would implement the same Plot Plan associated with the Proposed Project, resulting in the construction of the cargo building and tarmac extensions and improvements. Thus, Alternative 2 would result in the provision of a land use intensity (aviation facility) that would comply with the parameters of the March ARB/Inland Port ALUCP. As such, Alternative 2 would achieve this project objective.

Table 5-3. Alternative 2 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
Avoid impacts to, or impediment of, the remediation of the burn areas within Site 7.	Yes. Development of this alternative would have the same footprint as the Proposed Project and would avoid impacts to the burn areas of Site 7.
Provide increased job opportunities for local residents through the provision of employment-generating businesses.	Yes. Implementation of Alternative 2 would result in the generation of 150 employees, the same as the Proposed Project. Therefore, Alternative 2 would meet this project objective.
Improve access for airport users to the existing taxiways.	Yes. Development of Alternative 2 would result in the same taxiway extensions and realignments planned under the Proposed Project to provide aircraft access from the project site to the existing taxiways within March ARB. Therefore, Alternative 2 would meet this project objective.
Facilitate development of aviation uses other than federal military aviation.	Yes. Implementation of Alternative 2 would result in the development of civil aircraft aviation uses, as allowed by the joint use agreement between March JPA and DAF. The flight operations proposed under Alternative 2 would be consistent with the joint use agreement and Air Installations Compatible Use Zone terms. Therefore, Alternative 2 would meet this project objective.

Notes: MIP = March Inland Port; ARB = Air Reserve Base; ALUCP = Airport Land Use Compatibility Plan; DAF = U.S. Department of the Air Force.

5.4.4 Alternative 3: Reduced Flight Operations Alternative

Under Alternative 3, the Reduced Flight Operations Alternative, buildout of the project site would occur in an identical manner to the Proposed Project. Thus, Alternative 3 would result in the development of the Air Cargo Center Component and the Off-Site Component as discussed in Chapter 2, Project Description. The cargo building and all proposed taxiway and aircraft parking apron improvements, utility improvements, landscaping, and internal driveways/parking lots, as well as the work within the right-of-way along Heacock Street, would be constructed in the exact same manner as the Proposed Project. In addition, all off-site work planned under the Proposed Project, including the work to be completed in Work Areas 1–5, would occur under Alternative 3.

However, under Alternative 3, annual flight operations would be reduced by 10%, resulting in total annual operations of 9,548 flight operations. Flight operations would occur during the same hours as for the Proposed Project. Operation of the air cargo center would similarly be reduced by 10%.

5.4.4.1 Environmental Analysis

Aesthetics

As discussed in Section 3.1, Aesthetics, implementation of the Proposed Project would not result in the creation of a new source of substantial light or glare that would adversely affect day or nighttime views of the area. The project site is not an existing source of substantial light or glare due to the lack of development within the site, and the Proposed Project would introduce development and construction activity that would generate a source of light and glare. However, lighting associated with the Proposed Project would be of a similar nature and distribution as the lighting sources currently installed on warehouse and distribution facility properties in the surrounding area. Further, the proposed use of hoods or shields on all lighting fixtures, and the downward direction of all lighting sources, would also minimize the potential for outdoor lighting sources to produce glare that would be experienced

by off-site viewers. In addition, the installation of lighting fixtures with full cutoff fixtures and restriction of individual fixtures to not exceed 2,700 kelvin and 750 watts is included in the development plans. With regard to glare, the proposed cargo building would feature non-reflective stucco-clad exterior walls and limited windows that would be located at the main building entrance and along the building's east elevation (near the main entrance) that would not be directed towards sensitive off-site ground-based receptors. Therefore, based on the rationale provided above, lighting and glare impacts would be less than significant.

Under Alternative 3, the project site would be developed in the same manner as that proposed by the Project. Thus, development under Alternative 3 would contribute additional lighting to the area through the construction and operation of the air cargo center within the site, as well as through aircraft flight operations after sundown. Similar to the Proposed Project, development under this alternative would generate construction light and glare, and the applicant would be required to submit Form 7460-1, Notice of Proposed Construction or Alteration, to the FAA. With submittal of this form, and completion of a review of the proposed construction and alteration by the FAA (and identification of needed temporary lighting measures), in conjunction with the short duration and assumed infrequency of necessary nighttime construction, Alternative 3 would not create a new source of substantial light or glare that would adversely affect day- or nighttime views in the area, resulting in a less-than-significant impact, the same as the Proposed Project. Regarding operational light and glare impacts, Alternative 3 would implement development plans that would ensure that operational light and glare impacts would be less than significant, the same as the Proposed Project. Lastly, regarding March ARB taxiway lighting impacts, because Alternative 3 would result in the same alterations to the existing Taxiways A and G within March ARB, the project applicant would be required to submit FAA Form 7460-1, and because any new lighting constructed within Taxiways A, C, and G would be similar to and consistent with the existing March ARB lighting surrounding the project site, Alternative 3 would not create a new source of substantial light or glare that would adversely affect day- or nighttime views in the area. However, due to reduced annual aircraft operations and related reduction in distribution truck traffic, Alternative 3 would result in overall reduced nighttime lighting and glare impacts. Thus, Alternative 3 would result in **slightly reduced less-than-significant impacts** compared to the Proposed Project.

Air Quality

As discussed in Section 3.2, Air Quality, implementation of the Proposed Project would result in construction emissions that do not exceed the SCAQMD regional construction thresholds. Incorporation of **MM-AQ-1** (Construction Management Plan), which requires the Proposed Project to use Tier 4 off-road-construction equipment, and **MM-AQ-2** (Construction Requirements) would further reduce construction emissions and impacts would remain less than significant. Regional operational air quality impacts would be potentially significant, because the Proposed Project's daily regional emissions from ongoing non-peak and peak operations would exceed the thresholds of significance for emissions of VOCs, NO_x, and CO. The exceedance of the regional operational thresholds for VOCs, NO_x, and CO are primarily due to the Proposed Project's flight operations. The Proposed Project would implement **MM-AQ-1** through **MM-AQ-6** to reduce the Proposed Project's operational VOC, NO_x, and CO emissions; however, there is no meaningful way to quantify these reductions in CalEEMod; therefore, no numeric emissions credit was taken in the analysis. Therefore, the Proposed Project's regional operational VOC, NO_x, and CO emissions would be significant and unavoidable. The Proposed Project would not result in an exceedance of SCAQMD's localized significance thresholds, would not cause a CO hotspot, and would not cause a toxic air contaminant health risk impact. Accordingly, impacts to sensitive receptors and those related to odors would be less than significant, whereas overall air quality impacts would be significant and unavoidable.

Construction of Alternative 3 would result in the same construction air quality emissions generated as those identified for the Proposed Project. Incorporation of **MM-AQ-1**, which requires the use of Tier 4 off-road construction equipment, and **MM-AQ-2** would further reduce construction emissions impacts and impacts would remain less than significant, the same as the Proposed Project. Regarding operational emissions, the total annual flight operations generated by the Proposed Project (10,608 annual operations) would be reduced by 10%, resulting in a total of 9,548 annual operations. Thus, it can be estimated that total maximum daily emissions from aircraft sources for Alternative 3 would be reduced by 10%, when assuming the same type of aircraft would be used under this alternative. Operation of the air cargo center would similarly be reduced by 10%. CalEEMod utilizes summer and winter EMFAC2021 emission factors to derive vehicle emissions associated with Alternative 3 operational activities, which vary by season. Tables 5-4 and 5-5 provide the daily operational emission estimates assuming a 10% reduction in annual operations. As shown in these tables, even with a 10% reduction in annual operations, the total maximum daily emissions of VOC, NO_x, and CO would be reduced but would still exceed the applicable thresholds. Alternative 3 would also implement **MM-AQ-3** through **MM-AQ-6** to reduce the operational VOC, NO_x, and CO emissions, but impacts would remain significant and unavoidable. Alternative 3 would result in **reduced significant and unavoidable air quality impacts** compared to the Proposed Project.

Table 5-4. Alternative 3 Operational Emissions - Non-Peak Season, 48 Weeks

Source	Emissions (Pounds per Day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Mobile source	10.58	53.90	145.10	0.71	17.64	4.06
Area source	12.22	0.14	15.72	0.00	0.02	0.02
Energy source	0.10	1.86	1.56	0.02	0.14	0.14
On-site equipment source	0.23	0.75	32.89	0.00	0.06	0.05
Aircraft source ^a	157.46	500.08	657.16	37.26	5.22	5.18
Total Maximum Daily Emissions	180.59	556.73	852.43	37.99	23.08	9.45
<i>SCAQMD Regional Threshold</i>	55	55	550	150	150	55
Threshold Exceeded?	Yes	Yes	Yes	No	No	No

Source: Appendix B-1.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter with an aerodynamic diameter equal to or less than 10 microns; PM_{2.5} = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; <0.01 = reported emissions are less than 0.01; SCAQMD = South Coast Air Quality Management District. The emissions in this table are based on a CalEEMod summer emissions estimate.

^a Assumes a 10% reduction in total annual flight operations compared to the Proposed Project. Aircraft characteristics utilized for estimating aircraft emissions under the Proposed Project assumed 10,608 annual operations occurring from the March ARB Air Cargo facilities (5,304 arrivals and 5,304 departures; refer to Appendix B-1).

Table 5-5. Alternative 3 Operational Emissions - Peak Season, 4 Weeks

Source	Emissions (Pounds per Day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
Mobile source	10.11	56.70	119.70	0.69	17.64	4.06
Area source	9.64	0.00	0.00	0.00	0.00	0.00
Energy source	0.10	1.86	1.56	0.02	0.14	0.14
On-site equipment source	0.23	0.75	32.89	0.00	0.06	0.05
Aircraft source ^a	174.94	555.64	730.04	41.40	5.82	5.78

Table 5-5. Alternative 3 Operational Emissions - Peak Season, 4 Weeks

Source	Emissions (Pounds per Day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Total Maximum Daily Emissions	195.02	614.95	884.19	42.11	23.66	10.03
<i>SCAQMD Regional Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	Yes	Yes	Yes	No	No	No

Source: Appendix B-1.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter with an aerodynamic diameter equal to or less than 10 microns; PM_{2.5} = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; <0.01 = reported emissions are less than 0.01; SCAQMD = South Coast Air Quality Management District. Emissions in this table are based on a CalEEMod winter emissions estimate.

^a Assumes a 10% reduction in total annual flight operations compared to the Proposed Project. Aircraft characteristics utilized for estimating aircraft emissions under the Proposed Project assumed 10,608 annual operations occurring from the March ARB Air Cargo facilities (5,304 arrivals and 5,304 departures; refer to Appendix B-1).

Biological Resources

As discussed in Section 3.3, Biological Resources, implementation of the Proposed Project would result in less-than-significant biological resources impacts with implementation of **MM-BIO-1A** through **MM-BIO-5**. In regard to impacts to burrowing owls, **MM-BIO-1A** (Burrowing Owl Avoidance and Minimization Measures) requires pre-construction survey buffers for occupied burrows, and monitoring during construction to ensure complete avoidance of the occupied burrows. **MM-BIO-1B** (Burrowing Owl Relocation and Mitigation Plan) requires the preparation of a Burrowing Owl Relocation and Mitigation Plan and habitat compensation for the loss of occupied habitat. **MM-BIO-2** (Best Management Practices) establishes measures that require clearly marking work limits; restricting vehicle speed limits to 15 mph or less to minimize the generation of fugitive dust; providing pet restrictions; providing measures to ensure that trash and debris are disposed of properly to minimize short-term impacts of increased human activities; and the incorporation of native, non-invasive landscaping to minimize the spread of non-native invasive plant and animal species. In regard to impacts to San Diego black-tailed jackrabbit, **MM-BIO-2** would be implemented, as would **MM-BIO-3** (San Diego Black-Tailed Jackrabbit Avoidance and Minimization Measures), which requires a pre-construction survey to be conducted 30 days prior to ground-disturbing activities and the demarcation and avoidance of active maternity dens during the pup-rearing season (February 15 through July 1). Impacts to California glossy snake would be mitigated through implementation of **MM-BIO-2**. Impacts to protected nesting birds would be mitigated through implementation of **MM-BIO-4** (Nesting Bird Avoidance and Minimization Measures), which requires nesting bird surveys of the Proposed Project's impact areas; if active nests are found, the biologist must establish buffers and/or implement monitoring to avoid impacting avian nesting. Regarding impacts to jurisdictional waters, **MM-BIO-5** (Jurisdictional Waters Permitting and Regulatory Agency Permitting) would be implemented, which requires compensatory mitigation, that applicable resource agency permits are received prior to Proposed Project implementation, that equipment and spoil sites are not placed within or adjacent to aquatic resources, and that pollutants will be contained to prevent contamination of soils and/or waterways. Impacts to all other biological resources would be less than significant without the need for mitigation, whereas overall biological resources impacts would be less than significant with mitigation incorporated.

Under Alternative 3, development within the project site would occur in the same manner as the Proposed Project. Grading and construction activity would occur within the exact same footprint as the Proposed Project, and all operational aspects that would impact biological resources would be the same as for the Proposed Project. Therefore, Alternative 3 would be required to implement **MM-BIO-1A** through **MM-BIO-5**, which would result in biological resource

impacts that would be less than significant with mitigation incorporated, the same as the Proposed Project. Thus, Alternative 3 would result in the **same level of biological resource impacts** as the Proposed Project.

Cultural Resources

As discussed in Section 3.4, Cultural Resources, buildout of the Proposed Project would result in less-than-significant impacts to archaeological resources with implementation of **MM-CUL-1** (Archaeological and Tribal Monitoring), which requires a tribal monitor during all initial ground-disturbing activities and development of a CRMTP, and **MM-CUL-2** (Inadvertent Discovery of Archaeological Resources), which requires that all construction work occurring within 100 feet of a find to immediately stop until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology can evaluate the significance of the find. In addition, impacts related to the discovery of human remains would be less than significant with implementation of **MM-CUL-3** (Inadvertent Discovery of Human Remains), which requires handling in accordance with H&SC Section 7050.5 and California Public Resources Code Section 5097.98. Impacts related to historical resources would be less than significant, whereas overall impacts on cultural resources would be less than significant with mitigation incorporated.

Under Alternative 3, development within the project site would occur in the same manner as the Proposed Project, in that the Air Cargo Component and Off-Site Component under this alternative would be constructed within the same footprint as that for the Proposed Project. No grading or excavation activity are proposed under Alternative 3 that would exceed the boundary of areas previously analyzed for potential cultural resource impacts. Because grading and excavation would occur under Alternative 3, implementation of **MM-CUL-1** through **MM-CUL-3** would be required, which would ensure that impacts would be reduced to less than significant. Alternative 3 would not result in the potential to impact historical resources, because development would occur within the same footprint as that for the Proposed Project and would therefore not have the potential to disturb historical resources, the same as the Proposed Project. Impacts would be less than significant with mitigation incorporated, the same as the Proposed Project. Thus, Alternative 3 would result in the **same level of cultural resources impacts** as the Proposed Project.

Energy

As discussed in Section 3.5, Energy, construction and operation of the Proposed Project would result in less-than-significant impacts relating to wasteful, inefficient, or unnecessary consumption of energy resources. Mitigation for air quality (**MM-AQ-2** through **MM-AQ-5**) and GHG emissions (**MM-GHG-1**), although its beneficial effects are not quantifiable with regard to energy and therefore are not included in the analysis, would provide co-benefits that would further reduce the demand for energy and minimize any potential energy impacts relating to conflict with or obstruction of state or local plans for renewable energy or energy efficiency. Impacts would remain less than significant.

Under Alternative 3, the project site would be constructed in the same manner as the Proposed Project; therefore, energy demands associated with construction would be the same as the Proposed Project and construction-related energy impacts would be less than significant. Alternative 3 would also implement **MM-AQ-2** through **MM-AQ-5** and **MM-GHG-1**. Once operational, Alternative 3 would consume the same amount of electricity and natural gas as the Proposed Project. As shown in the technical study prepared for this alternative by Urban Crossroads, fuel sources and energy use would be reduced compared to the Proposed Project, because Alternative 3 would result in a reduction of total flight operations by 10% compared to the Proposed Project, resulting in total annual flight operations of 9,548 flights (Appendix B-1). This would yield an estimated annual fuel consumption of 1,350,198 gallons, which is a reduction of 302,045 gallons compared to the Proposed Project (Appendix B-1).

Thus, with the reduction in annual flight operations, total energy demand would be decreased compared to the Proposed Project. The reduction of flights would result in less fuel consumption during operation. Impacts would remain less than significant under Alternative 3, the same as the Proposed Project. However, because less fuel would be consumed during operations, Alternative 3 would result in a **lower level of energy impacts** compared to the Proposed Project.

Geology and Soils

As discussed in Section 3.6, Geology and Soils, buildout of the Proposed Project would result in less-than-significant impacts through compliance with and implementation of the recommendations included in the project-specific Geotechnical Exploration Report (Appendix H). In addition, impacts related to paleontological resources would be less than significant with implementation of **MM-GEO-1** (Paleontological Monitoring Program), which requires monitoring for and recovery of any found paleontological resources. All other geology and soils impacts would be less than significant, whereas overall geology and soils impacts would be less than significant with mitigation incorporated.

Under Alternative 3, development within the project site would occur in the same manner as the Proposed Project, in that the cargo building and all work to be completed within the project site and the off-site work areas would be constructed within the same footprint and in the same design as that planned under the Proposed Project. No grading or construction activity would be proposed under Alternative 3 that would exceed the boundary of areas previously analyzed, and all structures constructed within the project site and off-site work areas would be subject to compliance with the geotechnical recommendations contained in the Geotechnical Exploration Report (Appendix H); therefore, impacts related to seismic ground shaking/seismic-related ground failure, liquefaction, liquefaction-induced lateral spreading, dry dynamic settlement, soil collapse/settlement, and expansive soils would be less than significant, the same as the Proposed Project. Regarding paleontological resources, because grading and excavation would occur under Alternative 3 in the same manner as that planned under the Proposed Project and would occur within the same footprint as that for the Proposed Project, implementation of **MM-GEO-1** would be required, which would ensure that impacts to paleontological resources would be reduced to less than significant. Alternative 3 would not have the potential to disturb paleontological resources beyond what was analyzed for the Proposed Project. Impacts to geology and soils would be less than significant with mitigation incorporated, the same as the Proposed Project. Thus, Alternative 3 would result in the **same level of geology and soils impacts** as the Proposed Project.

Greenhouse Gas Emissions

As discussed in Section 3.7, Greenhouse Gas Emissions, the Proposed Project would be consistent with SB 32, SB 375, and the County of Riverside's CAP with implementation of **MM-AQ-2** through **MM-AQ-6** and **MM-GHG-1** (Installation of EV Charging Stations). Therefore, the Proposed Project's GHG impacts would be less than significant with mitigation incorporated. For informational purposes, the annual GHG emissions associated with operation of the Proposed Project are estimated to be 23,054.04 MT CO_{2e} per year. Emission reductions from implementation of **MM-AQ-2** through **MM-AQ-6** are not readily quantifiable; therefore, no reduction in emissions was taken for those measures.

Under Alternative 3, the project site would be built out in the same manner as the Proposed Project; thus, construction GHG emissions would be the same. Under Alternative 3, annual flight operations would be reduced by 10% compared to the Proposed Project. Operation of the air cargo center would similarly be reduced by 10%. Implementation of **MM-AQ-2** through **MM-AQ-6** and **MM-GHG-1** would be required under Alternative 3. Alternative 3 would be consistent with SB 32, SB 375, and the County of Riverside's CAP, similar to the Proposed Project. Therefore, Alternative 3's GHG impacts would be less than significant with mitigation incorporated. For

informational purposes, the estimated total MT CO₂e emissions with mitigation and with a 10% reduction in operations are provided in Table 5-6.

Table 5-6. Alternative 3 Greenhouse Gas Emissions (with Mitigation)

Emission Source	CO ₂ e Emissions (MT/yr) – Mitigated
Annual construction-related emissions amortized over 30 years	24.83
Mobile source	5,185.37
Area source	3.67
Energy source	332.09
Water	103.72
Waste	52.95
Refrigerant leakage	30.42
Cargo handling equipment	285.36
Aircraft ^a	16,114.93
<i>Reductions from Electric Vehicle Charging Stations</i>	-39
Alternative Total CO₂e Emissions (All Sources)	22,094.34

Source: Appendix B-1.

Notes: CO₂e = carbon dioxide equivalent; MT/yr = metric tons per year.

^a Assumes a 10% reduction in total annual flight operations compared to the Proposed Project. Aircraft characteristics utilized for estimating aircraft emissions under the Proposed Project assumed 10,608 annual operations occurring from the March ARB Air Cargo facilities (5,304 arrivals and 5,304 departures; refer to Appendix B-1).

Because total GHG emissions would be reduced, Alternative 3 would result in **reduced GHG emission impacts** compared to the Proposed Project.

Hazards and Hazardous Materials

As discussed in Section 3.8, Hazards and Hazardous Materials, implementation of the Proposed Project would result in less-than-significant impacts associated with Proposed Project construction with implementation of **MM-HAZ-1** (Hazardous Materials Contingency Plan) and **MM-HAZ-2** (Stop Work, Groundwater Management). **MM-HAZ-1** requires the project applicant to develop an HMCP that addresses the potential impacts to soil, soil vapor, and groundwater beneath the project site. Additionally, **MM-HAZ-1** requires the project applicant to submit the HMCP to EPA Region IX and the state for review prior to commencement of construction and/or soil disturbance activities on Site 7. **MM-HAZ-2** requires work activities to cease should groundwater be encountered during excavation and/or construction activities. In addition, implementation of **MM-HAZ-3** (Wildlife Protective Measures) would require that protective measures (e.g., security fencing) be placed to secure contaminated areas and prevent a hazard to human health or the environment (including wildlife). Overall hazards and hazardous materials impacts would be less than significant with mitigation incorporated.

Under Alternative 3, development within the project site would occur in the same manner as the Proposed Project, in that the cargo building and all work to be completed within the project site and the off-site work areas would be constructed within the same footprint and in the same design as that planned under the Proposed Project. All structures would be constructed to the identical specifications called for in the site plan. Demolition of existing structures, such as the tarmac, would occur in the same manner as the Proposed Project. No grading or excavation would be proposed under this alternative that would exceed the boundary of areas previously analyzed for potential hazards and hazardous material impacts. During construction of Alternative 3, a variety of hazardous materials would be transported, stored, and used during construction activities, which would be the same as those used during construction of the Proposed Project. Any handling, transport, use, or disposal would comply with all

applicable federal, state, and local regulations (as listed in Section 3.8.2 of the EIR), the same as the Proposed Project. Moreover, implementation of **MM-HAZ-1** and **MM-HAZ-2** would be required during construction and operation of Alternative 3, which would ensure that potential impacts associated with exposure to soil, soil vapor, and groundwater beneath the project site would be less than significant with mitigation incorporated. In addition, Alternative 3 would implement **MM-HAZ-3**, which requires protective measures (i.e., security fencing) to secure contaminated areas and prevent a hazard to human health or the environment (including wildlife). However, with the 10% reduction in operations, Alternative 3 would use reduced hazardous materials, such as fuel. Thus, Alternative 3 would result in **reduced hazards and hazardous material impacts** compared to the Proposed Project.

Hydrology and Water Quality

As discussed in Section 3.9, Hydrology and Water Quality, implementation of the Proposed Project would result in less-than-significant impacts associated with water quality standards and groundwater with implementation of **MM-HYD-1**, **MM-HAZ-1**, **MM-HAZ-2**, and **MM-AQ-6**, which require the following: incorporation of water quality BMPs into the Project design (**MM-HYD-1**); development of an HMCP and submitting it to EPA Region IX and to the state for approval prior to commencement of construction and/or soil disturbance activities on Site 7 (**MM-HAZ-1**); ceasing of work activities should groundwater be encountered during the course of Proposed Project construction and either management of contaminated groundwater or alteration of construction plans to avoid further contact with contaminated groundwater (**MM-HAZ-2**); and sweeping of the property monthly, including parking lot and truck court, to remove road dust, tire wear, brake dust, and other contaminants (**MM-AQ-6**). All other hydrology and water quality impacts would be less than significant, and overall hydrology and water quality impacts would be less than significant with mitigation incorporated.

Under Alternative 3, development within the project site would occur in the same manner as the Proposed Project, in that the cargo building and all work to be completed within the project site and the off-site work areas would be constructed within the same footprint and in the same design as that planned for the Proposed Project. No grading or excavation activity would be proposed under this alternative that would exceed the boundary of areas previously analyzed for potential hydrology and water quality impacts. Therefore, any grading and change to the existing hydrological setting would occur in the same manner as the Proposed Project. Thus, implementation of **MM-HYD-1**, **MM-HAZ-1**, **MM-HAZ-2**, and **MM-AQ-6** would be required. With implementation of these measures, impacts would be reduced to less than significant with mitigation incorporated, the same as the Proposed Project. Therefore, Alternative 3 would result in the **same level of hydrology and water quality impacts** as the Proposed Project.

Land Use and Planning

As discussed in Section 3.10, Land Use and Planning, construction and operation of the Proposed Project would result in less-than-significant land use and planning impacts with implementation of mitigation measures related to air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, and noise. **MM-LU-1** (Occupancy Limits) would also be incorporated into Proposed Project activities. Overall land use and planning impacts would remain less than significant with mitigation incorporated.

Under Alternative 3, development within the project site would occur in the same manner as the Proposed Project, in that the cargo building and all work to be completed within the project site and the off-site work areas would be constructed within the same footprint and in the same design as that planned under the Proposed Project. All structures would be constructed to the identical specifications called for in the site plans. Under Alternative 3, annual flight operations would be reduced by 10% compared to the Proposed Project. Operation of the air cargo center would similarly be reduced by 10%. Incorporation of **MM-LU-1**, as well as implementation of mitigation

measures related to air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, and noise, would be required under this alternative. Impacts would be less than significant with mitigation incorporated. As such, Alternative 3 would result in **comparable land use and planning impacts** to the Proposed Project.

Noise

As discussed in Section 3.11, Noise, once operational, the Proposed Project would result in less-than-significant impacts associated with exposure of workers to excessive noise relating to potential aircraft noise levels within the cargo building, with implementation of **MM-NOI-1** (Construction Worker Hearing Protection). **MM-NOI-1** requires the project applicant to provide evidence that the subject plans contain requirements with respect to contractor(s) providing employees with personal protective equipment per 8 CCR, Section 5096, and OSHA information (e.g., Publication 3498). The cargo aircraft flight operations of the Proposed Project would result in an increase in the ambient noise environment. Noise impacts due to Proposed Project aircraft operations would be **significant and unavoidable** even with the application of feasible mitigation, **MM-NOI-2** (Future Tenant Aircraft Fleet), which requires that prior to issuance of a certificate of occupancy a noise analysis be provided confirming that the proposed tenant's aircraft fleet mix would not exceed the noise levels disclosed in this EIR; absent such documentation, additional environmental review is required. Therefore, noise impacts due to Proposed Project aircraft operations would be significant and unavoidable even with the application of feasible mitigation. The Proposed Project would have less than significant impacts related to potential sleep disturbance from nighttime aircraft operations.

Under Alternative 3, Reduced Flight Operations Alternative, buildout of the project site would occur in an identical manner to the Proposed Project, in that the Air Cargo Center Component and all proposed taxiway, taxilane, and aircraft parking apron improvements; utility improvements; landscaping; and internal roadways/parking lots would be constructed in the exact same manner as the Proposed Project. Therefore, construction noise generated by the Proposed Project would be the same under Alternative 3 and require implementation of **MM-NOI-1**. The operational aspects would remain the same as those identified for the Proposed Project but would be reduced by 10%. As such, the number of trips would be reduced by 10%, as would annual flight operations, resulting in the total annual cargo aircraft operations of 9,548 flights. Under Alternative 3, the potential for sleep disturbance between the hours of 10:00 p.m. and 7:00 a.m. would remain the same as the Proposed Project, because the potential for sleep disturbance is primarily based on the single-event sound exposure level from the aircraft fleet, which would remain the same. The reduction of vehicle and truck trips on area roadways would result in a reduction of approximately 0.45 dB CNEL at noise-sensitive receptors adjacent to roadway segments used by the Proposed Project. Flight operations would occur during the same hours as the Proposed Project (7:00 a.m. to 11:00 p.m.); however, the reduction of cargo aircraft flight operations would result in noise-level reductions of approximately 0.5 dB at noise-sensitive receptors with the greatest exposure to the Proposed Project's flight operations. The ambient noise level increase that would occur under Alternative 3 would exceed the relative increase thresholds. Therefore, **MM-NOI-2** would also be implemented under Alternative 3, but impacts would remain significant and unavoidable, similar to the Proposed Project. Therefore, Alternative 3 would result in a **slightly reduced level of noise impacts** compared to the Proposed Project, but impacts would remain significant and unavoidable.

Transportation

As discussed in Section 3.12, Transportation, construction of the Proposed Project would result in VMT per employee of 23.12, which is below the WRCOG significance threshold of 25.47 VMT per employee (approximately 9.23% below the threshold). Therefore, the Proposed Project's VMT impact would be less than significant. Additionally, all other transportation-related impacts would be less than significant or less than significant with mitigation incorporated. The

Proposed Project would incorporate **PDF-TRA-1** (Payment of Fair-Share Cost) and would include implementation of **MM-TRA-1** (Construction Management Plan) and **MM-TRA-2** (Project Truck Route on Heacock Street). **PDF-TRA-1** requires the Proposed Project to contribute its fair share toward intersection improvement measures. **MM-TRA-1** requires the applicant to develop and implement a project-specific CTMP approved by March JPA, and **MM-TRA-2** requires all Proposed Project truck traffic to utilize the Harley Knox Boulevard interchange at I-215 and the designated truck routes to the south of the project site. Overall transportation impacts would be less than significant with mitigation incorporated.

Under Alternative 3, the project site would be built out in the same manner as the Proposed Project. Under Alternative 3, annual flight operations would be reduced by 10% compared to the Proposed Project. Operation of the air cargo center would similarly be reduced by 10%. Alternative 3 would incorporate **PDF-TRA-1**, **MM-TRA-1**, and **MM-TRA-2**. Operations would be reduced by 10%, and the employee count under this alternative would also be reduced by 10% compared to the Proposed Project. Thus, the employee trip generation rate would be less than the Proposed Project, and this alternative's impact based on VMT would be less than significant, the same as the Proposed Project. Therefore, Alternative 3 would result in **reduced transportation impacts** compared to the Proposed Project.

Tribal Cultural Resources

As discussed in Section 3.13, Tribal Cultural Resources, buildout of the Proposed Project would result in less-than-significant impacts to TCRs with implementation of **MM-CUL-1** (Archaeological and Tribal Monitoring), which requires the project applicant/developer to retain a qualified tribal monitor to monitor all initial ground-disturbing activities. **MM-CUL-1** also requires the Proposed Project's qualified archaeological Principal Investigator to develop a CRMTP prior to Proposed Project commencement. Impacts related to TCRs that are listed or eligible for listing in the CRHR or in a local register of historical resources as defined in California Public Resources Code Section 5020.1(k) would be less than significant with mitigation incorporated.

Under Alternative 3, development within the project site would occur in the same manner as that planned for the Proposed Project; thus, grading and excavation activities within the project area would occur, resulting in the potential to impact TCRs. Therefore, implementation of **MM-CUL-1** would be required. With implementation of **MM-CUL-1**, Alternative 3 would result in a less-than-significant impact with mitigation incorporated, the same as the Proposed Project. Thus, Alternative 3 would result in the **same level of impacts to TCRs** as the Proposed Project.

Utilities and Service Systems

As discussed in Section 3.14, Utilities and Service Systems, the Proposed Project would have less-than-significant impacts to facilities providing water, wastewater, stormwater, electric power, natural gas, and telecommunications. There are sufficient water supplies available and wastewater treatment capacity to serve the Proposed Project, resulting in less-than-significant impacts. The Proposed Project would have no impact on solid waste infrastructure and capacity and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, resulting in less-than-significant impacts. Therefore, the Proposed Project's impacts to utilities and service systems would be less than significant and no mitigation is required.

Under Alternative 3, development within the project site would occur in the same manner as that planned for the Proposed Project. Under Alternative 3, annual flight operations would be reduced by 10% compared to the Proposed Project. Operation of the air cargo center would similarly be reduced by 10%. Thus, Alternative 3 would result in less-than-significant impacts related to facilities providing water, wastewater, stormwater, electric power, natural

gas, and telecommunications. Alternative 3 would require a reduced level of water and wastewater treatment capacity compared to the Proposed Project. In addition, Alternative 3 would result in a reduced amount of solid waste generated during the construction and grading process and the operation of the Proposed Project, because the development of the site and the number of employees would be the same as the Proposed Project but annual flight operations and air cargo operations would be reduced by 10%, thereby resulting in less-than-significant impacts relating to solid waste. Thus, Alternative 3 would result in a **reduced level of less-than-significant impacts to utilities and service systems** compared to the Proposed Project.

5.4.4.2 Project Objectives

Under Alternative 3, the project site would be built out in the same manner as the Proposed Project. Annual flight operations would be reduced by 10% compared to the Proposed Project. Operation of the air cargo center would similarly be reduced by 10%. Table 5-7 provides a list of the project objectives and whether Alternative 3 meets each objective. As discussed in this table, Alternative 3 would meet all project objectives, but to a lesser extent than the Proposed Project.

Table 5-7. Alternative 3 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
More fully utilize the operations capacity of the March Inland Port Airport to meet regional demands for air cargo services within Southern California and the greater region, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region.	Yes. Development of this alternative would result in the provision of additional air cargo operations that would more fully utilize the operations capacity of MIP Airport to meet regional demands for air cargo services within Southern California and the greater region. However, this alternative would result in a reduction of annual flight operations compared to the Proposed Project, which would not help to alleviate congestion or overtaxed air and roadway facilities within the greater region to the same extent as the Proposed Project. Therefore, this alternative would meet this project objective, albeit to a lesser extent than the Proposed Project.
Provide appropriate land use intensities to comply with the parameters of the March Air Reserve Base/Inland Port Airport Compatibility Plan.	Yes. As discussed in the environmental analysis above, the project site would be constructed in the same manner as that planned under the Proposed Project and would provide a land use (aviation) that is consistent with the allowed uses of the March ARB/Inland Port ALUCP. The proposed Plot Plan associated with the Proposed Project would be implemented, resulting in the construction of the cargo building and tarmac extensions and improvements. Thus, Alternative 3 would result in the provision of a land use intensity (aviation facility) that would comply with the parameters of the March ARB/Inland Port ALUCP. As such, Alternative 3 would achieve this project objective.
Avoid impacts to, or impediment of, the remediation of the burn areas within Site 7.	Yes. Development of this alternative would have the same footprint as the Proposed Project and would avoid impacts to the burn areas of Site 7.
Provide increased job opportunities for local residents through the provision of employment-generating businesses.	Yes. Implementation of Alternative 3 would result in the generation of jobs. Therefore, Alternative 3 would meet this project objective to a lesser extent than the Proposed Project.
Improve access for airport users to the existing taxiways.	Yes. Development of Alternative 3 would result in the same taxiway extensions and realignments planned under the Proposed Project to provide aircraft access from the project site to the existing taxiways within March ARB. Therefore, Alternative 3 would meet this project objective.

Table 5-7. Alternative 3 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
Facilitate development of aviation uses other than federal military aviation.	Yes. Implementation of Alternative 3 would result in the development of civil aircraft aviation uses, as allowed by the joint use agreement between March JPA and DAF. The total annual flights under this alternative would be consistent with the joint use agreement and Air Installations Compatible Use Zone terms. Therefore, Alternative 3 would meet this project objective.

Notes: MIP = March Inland Port; ARB = Air Reserve Base; ALUCP = Airport Land Use Compatibility Plan; DAF = U.S. Department of the Air Force.

5.4.5 Alternative 4: Private Aircraft Services Alternative

Under Alternative 4, the Private Aircraft Services Alternative, a private aircraft terminal facility would be constructed within the same building footprint as the cargo building included in the Proposed Project. The private aircraft terminal facility would be used to provide either a new operation or an expansion of the private aircraft service facilities located south of the project site to allow for an increase in the use of private aircraft services from MIP Airport. With construction of a private aircraft terminal facility, the 9 grade-level loading doors, 31 truck dock positions, and 37 trailer storage positions included in the Proposed Project would not be constructed. Development under this alternative would include construction of a tarmac and parking apron allowing for aircraft to access the terminal facility. This would include construction of a new taxilane (Taxilane J) that would provide aircraft access to the existing Taxiway A within March ARB. Alternative 4 would also include an expansion of Taxiway G and construction of a parking apron adjacent to the western boundary of the terminal facility. The proposed tarmac expansion, Taxilane J, and parking aprons would be sized to accommodate private aircraft and would be paved to meet FAA standards. The tarmac expansion, both within the project site and within March ARB, would occur in the same manner as that planned for the Proposed Project. Access to the project site, as well as the terminal facility, would be constructed in the same manner as that planned for the Proposed Project. In addition, all off-site work planned under the Proposed Project, including the work to be completed in Work Areas 1–5, would occur under this alternative. Overall, development of Alternative 4 would result in similar construction activities as those planned under the Proposed Project, with the only change being the ultimate operational use associated with the building to be constructed in place of the cargo building.

Once operational, Alternative 4 would accommodate private aircraft, rather than commercial aircraft, in contrast to the Proposed Project. In addition, because there would be no air cargo facility constructed under this alternative, no air cargo would be transported to or from the project site, eliminating the movement of goods-distribution trucks to and from the project site. However, personal vehicle trips would be added for passengers of the private aircraft, and the anticipated number of employees would be 52, resulting in a reduction of employees compared to the Proposed Project. Annual flights under Alternative 4 would remain the same as the Proposed Project; however, flight operations would not occur between 10:00 p.m. and 11:00 p.m. (approximately 5% of the Proposed Project’s flight operations).

5.4.5.1 Environmental Analysis

Aesthetics

As discussed in Section 3.1, Aesthetics, implementation of the Proposed Project would not result in the creation of a new source of substantial light or glare that would adversely affect day or nighttime views of the area. The project site is not an existing source of substantial light or glare due to the lack of development within the site, and the

Proposed Project would introduce development and construction activity that would generate a source of light and glare. However, lighting associated with the Proposed Project would be of a similar nature and distribution as the lighting sources currently installed on warehouse and distribution facility properties in the surrounding area. Further, the proposed use of hoods or shields on all lighting fixtures, and the downward direction of all lighting sources, would also minimize the potential for outdoor lighting sources to produce glare that would be experienced by off-site viewers. In addition, the installation of lighting fixtures with full cutoff fixtures and restriction of individual fixtures to not exceed 2,700 kelvin and 750 watts is included in the development plans. With regard to glare, the proposed cargo building would feature non-reflective stucco-clad exterior walls and limited windows that would be located at the main building entrance and along the building's east elevation (near the main entrance) that would not be directed towards sensitive off-site ground-based receptors. Therefore, based on the rationale provided above, impacts would be less than significant.

Under Alternative 4, the project site would be developed with a new private aircraft facility terminal in place of the cargo building, but all other development within the project site would remain the same as that planned under the Proposed Project. Thus, development under Alternative 4 would contribute additional lighting to the area through the construction and operation of the private aircraft facility within the site, as well as through private aircraft use that could operate after sundown. Similar to the Proposed Project, development under Alternative 4 would generate construction light and glare, and the applicant would be required to submit Form 7460-1, Notice of Proposed Construction or Alteration, to FAA. With submittal of this form and completion of a review of the proposed construction and alteration by FAA (and identification of needed temporary lighting measures), in conjunction with the short duration and assumed infrequency of necessary nighttime construction, Alternative 4 would not create a new source of substantial light or glare that would adversely affect day- or nighttime views in the area, resulting in a less-than-significant impact, the same as the Proposed Project. Regarding operational light and glare impacts, Alternative 4 would implement development plans that would ensure that operational light and glare impacts would be less than significant, the same as the Proposed Project. Lastly, regarding March ARB taxiway lighting impacts, because Alternative 4 would result in the same alterations to the existing Taxiways A and G within March ARB, the project applicant would be required to submit FAA Form 7460-1, and because any new lighting constructed within Taxiways A, C, and G would be similar to and consistent with the existing March ARB lighting surrounding the project site, Alternative 4 would not create a new source of substantial light or glare that would adversely affect day- or nighttime views in the area. However, compared to commercial aircraft, smaller private aircraft would likely have reduced lighting requirements and operation of a private aircraft facility would result in overall reduced lighting due to restriction of operations between 10:00 p.m. and 11:00 p.m. and overall reduction in project-related traffic (both employees and private aircraft users [as opposed to distribution truck traffic under the Proposed Project]). While impacts would be less than significant, the same as the Proposed Project, Alternative 4 would result in **reduced aesthetic impacts** compared to the Proposed Project.

Air Quality

As discussed in Section 3.2, Air Quality, implementation of the Proposed Project would result in construction emissions that do not exceed SCAQMD's regional construction thresholds. Incorporation of **MM-AQ-1** (Construction Management Plan), which requires the Proposed Project to use Tier 4 off-road-construction equipment, and **MM-AQ-2** (Construction Requirements) would further reduce construction emissions and impacts would remain less than significant. Regional operational air quality impacts would be potentially significant, because the Proposed Project's daily regional emissions from ongoing non-peak and peak operations would exceed the thresholds of significance for emissions of VOCs, NO_x, and CO. The exceedance of the regional operational thresholds for VOCs, NO_x, and CO would be primarily due to the Proposed Project's flight operations. The Proposed Project would implement **MM-AQ-3** through **MM-AQ-6** to reduce the Proposed Project's operational VOC, NO_x, and CO emissions;

however, there is no meaningful way to quantify these reductions in CalEEMod and therefore no numeric emissions credit was taken in the analysis. Therefore, the Proposed Project's regional operational VOC, NO_x, and CO emissions would be significant and unavoidable. The Proposed Project would not result in an exceedance of SCAQMD's localized significance thresholds, would not cause a CO hotspot, and would not cause a toxic air contaminant health risk impact. Accordingly, impacts to sensitive receptors and those related to odors would be less than significant. Overall operational air quality impacts would be significant and unavoidable.

Construction of Alternative 4 would result in the same construction air quality emissions generated as those identified for the Proposed Project. Incorporation of **MM-AQ-1** and **MM-AQ-2** under Alternative 4 would further reduce construction emissions, and impacts would remain less than significant, the same as for the Proposed Project. Under Alternative 4, operational emissions would decrease because this alternative would eliminate commercial aircraft but would accommodate smaller private aircraft and would also eliminate the movement of goods-distribution trucks to and from the project site. Table 5-8 provides the daily operational emissions estimate for Alternative 4. As shown in Table 5-8, changing to a private aircraft service would reduce the total maximum daily emissions of VOC, NO_x, and CO below the applicable thresholds. Thus, impacts would be less than significant and no mitigation would be required. Alternative 4 would avoid the Proposed Project's significant and unavoidable air quality impacts, resulting in **significantly reduced air quality impacts** compared to the Proposed Project.

Table 5-8. Alternative 4 Operational Emissions

Source	Emissions (Pounds per Day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
Mobile source	1.57	8.12	21.58	0.10	2.64	0.61
Area source	12.22	0.14	15.72	0.00	0.02	0.02
Energy source	0.10	1.86	1.56	0.02	0.14	0.14
Ground equipment source	0.70	2.25	98.67	0.00	0.18	0.16
Aircraft source	27.06	21.06	244.38	4.02	0.92	0.92
Total Maximum Daily Emissions	41.65	33.43	381.91	4.14	3.90	1.85
<i>SCAQMD Regional Threshold</i>	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Winter						
Mobile source	1.50	8.54	17.75	0.10	2.64	0.61
Area source	9.64	0.00	0.00	0.00	0.00	0.00
Energy source	0.10	1.86	1.56	0.02	0.14	0.14
Ground equipment source	0.70	2.25	98.67	0.00	0.18	0.16
Aircraft source	27.06	21.06	244.38	4.02	0.92	0.92
Total Maximum Daily Emissions	39.00	33.71	362.36	4.14	3.88	1.83
<i>SCAQMD Regional Threshold</i>	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: Appendix B-1.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter with an aerodynamic diameter equal to or less than 10 microns; PM_{2.5} = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; <0.01 = reported emissions are less than 0.01; SCAQMD = South Coast Air Quality Management District.

Biological Resources

As discussed in Section 3.3, Biological Resources, implementation of the Proposed Project would result in less-than-significant biological resources impacts with implementation of **MM-BIO-1A** through **MM-BIO-5**. In regard to impacts to burrowing owls, **MM-BIO-1A** (Burrowing Owl Avoidance and Minimization Measures) requires pre-construction surveys buffers for occupied burrows, and monitoring during construction to ensure complete avoidance of the occupied burrows. **MM-BIO-1B** (Burrowing Owl Relocation and Mitigation Plan) requires the preparation of a Burrowing Owl Relocation and Mitigation Plan and habitat compensation for the loss of occupied habitat. **MM-BIO-2** (Best Management Practices) establishes measures that require clearly marking work limits; restricting vehicle speed limits to 15 mph or less to minimize the generation of fugitive dust; providing pet restrictions; providing measures to ensure that trash and debris are disposed of properly to minimize short-term impacts of increased human activities; and the incorporation of native, non-invasive landscaping to minimize the spread of non-native invasive plant and animal species. In regard to impacts to San Diego black-tailed jackrabbit, **MM-BIO-2** would be implemented, as would **MM-BIO-3** (San Diego Black-Tailed Jackrabbit Avoidance and Minimization Measures), which requires a pre-construction survey to be conducted 30 days prior to ground-disturbing activities and the demarcation and avoidance of active maternity dens during the pup-rearing season (February 15 through July 1). Impacts to California glossy snake would be mitigated through implementation of **MM-BIO-2**. Impacts to protected nesting birds would be mitigated through implementation of **MM-BIO-4** (Nesting Bird Avoidance and Minimization Measures), which requires nesting bird surveys of the Proposed Project's impact areas; if active nests are found, the biologist would establish buffers and/or implement monitoring to avoid impacting avian nesting success. Regarding impacts to jurisdictional waters, **MM-BIO-5** (Jurisdictional Waters Permitting and Regulatory Agency Permitting), which requires compensatory mitigation, that applicable resource agency permits are received prior to Proposed Project implementation, that equipment and spoil sites are not placed within or adjacent to aquatic resources, and that pollutants be contained to prevent contamination of soils and/or waterways, would be implemented. Impacts to all other biological resources would be less than significant without the need for mitigation. Overall biological resources impacts would be less than significant with mitigation incorporated.

Under Alternative 4, development within the project site would occur in the same manner as the Proposed Project. Grading and construction activity would occur within the exact same footprint as the Proposed Project, and all operational aspects that would impact biological resources would be the same as the Proposed Project. Therefore, implementation of **MM-BIO-1A** through **MM-BIO-5** would be required, which would result in biological resource impacts that would be less than significant with mitigation incorporated, the same as the Proposed Project. Thus, Alternative 4 would result in the **same level of biological resources impacts** as the Proposed Project.

Cultural Resources

As discussed in Section 3.4, Cultural Resources, buildout of the Proposed Project would result in less-than-significant impacts to archaeological resources with implementation of **MM-CUL-1** (Archaeological and Tribal Monitoring), which requires a tribal monitor during all initial ground-disturbing activities and development of a CRMTP, and **MM-CUL-2** (Inadvertent Discovery of Archaeological Resources), which requires that all construction work occurring within 100 feet of a find to immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find. In addition, impacts related to the discovery of human remains would be less than significant with implementation of **MM-CUL-3** (Inadvertent Discovery of Human Remains), which requires handling in accordance with H&SC Section 7050.5 and California Public Resources Code Section 5097.98. Impacts related to historical resources would be less than significant. Overall cultural resources impacts would be less than significant with mitigation incorporated.

Under Alternative 4, development within the project site would occur in the same manner as the Proposed Project, in that the private aircraft terminal facility would be constructed within the same footprint as that planned for the Proposed Project. No grading or excavation activity would occur under this alternative that would exceed the boundary of areas previously analyzed for potential cultural resource impacts. Because grading and excavation would occur under Alternative 4, implementation of **MM-CUL-1** through **MM-CUL-3** would be required, which would ensure that impacts would be reduced to less than significant. Alternative 4 would not result in the potential to impact historical resources, as development would occur within the same footprint as that planned under the Proposed Project and would therefore not have the potential to disturb historical resources, the same as the Proposed Project. Impacts would be less than significant with mitigation incorporated, the same as the Proposed Project. Therefore, Alternative 4 would result in the **same level of cultural resources impacts** as the Proposed Project.

Energy

As discussed in Section 3.5, Energy, construction and operation of the Proposed Project would result in less-than-significant impacts relating to wasteful, inefficient, or unnecessary consumption of energy resources. Mitigation for air quality (**MM-AQ-2** through **MM-AQ-5**) and GHG emissions (**MM-GHG-1**), although its beneficial effects are not quantifiable with regard to energy and therefore are not included in the analysis, would provide co-benefits that would further reduce the demand for energy and minimize any potential impacts relating to conflict with or obstruction of state or local plans for renewable energy or energy efficiency. Impacts would remain less than significant.

Under Alternative 4, the project site would be constructed in the same manner as the Proposed Project; therefore, energy demands associated with construction would be the same as for the Proposed Project and construction-related energy impacts would be less than significant. Alternative 3 would also implement **MM-AQ-3**, **MM-AQ-5**, and **MM-GHG-1**. Once operational, all energy-utilizing sources under Alternative 4 would consume the same amount of electricity and natural gas as the Proposed Project. As shown in the technical study prepared for this alternative by Urban Crossroads, fuel sources and energy use would be reduced compared to the Proposed Project, because Alternative 4 would include only smaller private aircraft and would eliminate the goods-distribution vehicles (trucks). This would yield an estimated annual motor vehicle fuel consumption of 201,550 gallons, which is a reduction of 420,918 gallons compared to the Proposed Project (Appendix B-1). Annual aircraft fuel use associated with Alternative 4 would be 142,682 gallons, which is a reduction of 1,509,561 gallons compared to the Proposed Project (Appendix B-1). Thus, Alternative 4 would result in a reduction in total energy demand compared to the Proposed Project. Impacts would remain less than significant under Alternative 4, the same as the Proposed Project. However, because less energy would be consumed during operations, Alternative 4 would result in **reduced energy impacts** compared to the Proposed Project.

Geology and Soils

As discussed in Section 3.6, Geology and Soils, buildout of the Proposed Project would result in less-than-significant impacts with compliance with and implementation of the recommendations included in the project-specific Geotechnical Exploration Report (Appendix H). In addition, impacts related to paleontological resources would be less than significant with implementation of **MM-GEO-1** (Paleontological Monitoring Program), which requires monitoring for and recovery of any found paleontological resources.

Under Alternative 4, development within the project site would occur in the same manner as the Proposed Project, in that the private aircraft terminal facility, and all work to be completed within the project site and off-site work areas, would be constructed within the same footprint as that planned for the Proposed Project. No grading or

excavation activity would be proposed under this alternative that would exceed the boundary of areas previously analyzed, and all structures constructed within the project site and off-site work areas would be subject to compliance with the geotechnical recommendations contained in the project-specific Geotechnical Exploration Report (Appendix H). Under Alternative 4, impacts related to seismic ground shaking/seismic-related ground failure, liquefaction, liquefaction-induced lateral spreading, dry dynamic settlement, soil collapse/settlement, and expansive soils would be less than significant, the same as the Proposed Project. Because grading and excavation would occur under Alternative 4 in the same manner as that planned under the Proposed Project, implementation of **MM-GEO-1** would be required, which would ensure that impacts to paleontological resources would be reduced to less than significant with mitigation. Alternative 4 would result in grading and excavation activity that would occur within the same footprint as that for the Proposed Project and would therefore not have the potential to disturb paleontological resources beyond what was analyzed for the Proposed Project. Impacts to geology and soils would be less than significant with mitigation incorporated, the same as the Proposed Project. Therefore, Alternative 4 would result in the **same level of geology and soils impacts** as the Proposed Project.

Greenhouse Gas Emissions

As discussed in Section 3.7, Greenhouse Gas Emissions, the Proposed Project would be consistent with SB 32, SB 375, and the County of Riverside's CAP with implementation of **MM-AQ-2** through **MM-AQ-6** and **MM-GHG-1** (Installation of EV Charging Stations). Therefore, the Proposed Project's GHG impacts would be less than significant with mitigation incorporated. For informational purposes, the annual GHG emissions associated with operation of the Proposed Project are estimated to be 23,054.04 MT CO_{2e} per year. Emission reductions from implementation of **MM-AQ-2** through **MM-AQ-6** are not readily quantifiable; therefore, no reduction in emissions was taken for those measures.

Under Alternative 4, the project site would be developed with a new private aircraft facility terminal in place of the cargo building, but all other development within the project site would remain the same as that planned for the Proposed Project. Construction emissions would be the same as the Proposed Project. Operationally, Alternative 4 would accommodate private aircraft rather than commercial aircraft and would eliminate good-distribution trucks to and from the project site. Implementation of **MM-GHG-1** would be required under Alternative 4. Alternative 4 would be consistent with SB 32, SB 375, and the County of Riverside's CAP. Therefore, Alternative 4's GHG impacts would be less than significant with mitigation incorporated. For informational purposes, the estimated total MT CO_{2e} emissions with mitigation of Alternative 4 are provided in Table 5-9.

Table 5-9. Alternative 4 Greenhouse Gas Emissions (with Mitigation)

Emission Source	CO _{2e} Emissions (MT/yr) – Mitigated
Annual construction-related emissions amortized over 30 years	24.83
Mobile source	1,860.00
Area source	7.36
Energy source	666.00
Water	208.00
Waste	106.20
Refrigerant leakage	61.00
Cargo handling equipment	572.30
Aircraft	1,702.94
<i>Reductions from Electric Vehicle Charging Stations</i>	-39
Alternative Total CO_{2e} Emissions (All Sources)	5,169.63

Source: Appendix B-1.

Notes: CO_{2e} = carbon dioxide equivalent; MT/yr = metric tons per year.

As shown in Table 5-9, total CO₂e emissions from all sources for Alternative 4 would result in 5,169.63 MT per year, which is 17,884.41 MT per year less than was estimated for the Proposed Project. Because total GHG emissions would be reduced under Alternative 4 with the operational changes, this alternative would result in **reduced GHG emission impacts** compared to the Proposed Project.

Hazards and Hazardous Materials

As discussed in Section 3.8, Hazards and Hazardous Materials, implementation of the Proposed Project would result in less-than-significant impacts associated with Proposed Project construction with implementation of **MM-HAZ-1** (Hazardous Materials Contingency Plan) and **MM-HAZ-2** (Stop Work, Groundwater Management). **MM-HAZ-1** requires the project applicant to develop an HMCP that addresses the potential impacts to soil, soil vapor, and groundwater beneath the project site. Additionally, **MM-HAZ-1** requires the project applicant to submit the HMCP to the EPA Region IX and the state for review prior to commencement of construction and/or soil disturbance activities on Site 7. **MM-HAZ-2** requires work activities to cease should groundwater be encountered during excavation and/or construction activities. In addition, implementation of **MM-HAZ-3** (Wildlife Protective Measures) during operation of the Project would require that protective measures (e.g., security fencing) be placed to secure contaminated areas and prevent a hazard to human health or the environment (including wildlife). Overall hazards and hazardous materials impacts would be less than significant with mitigation incorporated.

Under Alternative 4, development within the project site would occur in the same manner as the Proposed Project, in that the cargo building and all work to be completed within the project site and the off-site work areas would be constructed within the same footprint as that planned for the Proposed Project. Demolition of existing structures, such as the tarmac, would occur in the same manner as the Proposed Project. No grading or excavation would be proposed under this alternative that would exceed the boundary of areas previously analyzed for potential hazards and hazardous material impacts. During construction of Alternative 4, a variety of hazardous materials would be transported, stored, and used during construction activities, which would be the same as those used during construction of the Proposed Project. Any handling, transport, use, or disposal would comply with all applicable federal, state, and local regulations (as listed in Section 3.8.2 of the EIR), the same as the Proposed Project. Moreover, implementation of **MM-HAZ-1** and **MM-HAZ-2** would be required during construction and operation of Alternative 4, which would ensure that potential impacts associated with exposure to soil, soil vapor, and groundwater beneath the project site would be less than significant with mitigation incorporated. In addition, Alternative 4 would implement **MM-HAZ-3**, which would result in less-than-significant impacts associated with operation. Alternative 4 would utilize less hazardous materials, such as fuel. Thus, Alternative 4 would result in a **reduced level of hazards and hazardous material impacts** compared to the Proposed Project.

Hydrology and Water Quality

As discussed in Section 3.9, Hydrology and Water Quality, implementation of the Proposed Project would result in less-than-significant impacts associated with water quality standards and groundwater with implementation of **MM-HYD-1**, **MM-HAZ-1**, **MM-HAZ-2**, and **MM-AQ-6**, which require the following: incorporation of water quality BMPs into the Project design (**MM-HYD-1**); development of an HMCP and submitting it to EPA Region IX and to the state for approval prior to commencement of construction and/or soil disturbance activities on Site 7 (**MM-HAZ-1**); ceasing of work activities should groundwater be encountered during the course of Proposed Project construction and either management of contaminated groundwater or alteration of construction plans to avoid further contact with contaminated groundwater (**MM-HAZ-2**); and sweeping of the property monthly, including parking lot and truck court, to remove road dust, tire wear, brake dust, and other contaminants (**MM-AQ-6**). All other hydrology and water

quality impacts would be less than significant, and overall hydrology and water quality impacts would be less than significant with mitigation incorporated.

Under Alternative 4, development within the project site would occur in the same manner as the Proposed Project in that the private aircraft terminal facility would be constructed within the same footprint as that for the Proposed Project. No grading or excavation would be proposed under this alternative that would exceed the boundaries of areas previously analyzed for potential hydrology and water quality impacts. Therefore, any grading and change to the existing hydrological setting would occur in the same manner as the Proposed Project. Thus, implementation of **MM-HYD-1**, **MM-HAZ-1**, **MM-HAZ-2**, and **MM-AQ-6** would be required. With implementation of these measures, impacts would be reduced to less than significant with mitigation incorporated, the same as the Proposed Project. Therefore, Alternative 4 would result the **same level of hydrology and water quality impacts** as the Proposed Project.

Land Use and Planning

As discussed in Section 3.10, Land Use and Planning, construction and operation of the Proposed Project would result in less-than-significant land use and planning impacts with implementation of mitigation measures related to air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, and noise. **MM-LU-1** would also be incorporated into Proposed Project activities. Overall impacts under the Proposed Project would be less than significant with mitigation incorporated.

Under Alternative 4, development within the project site would occur in the same manner as the Proposed Project, in that the private aircraft terminal facility would be constructed within the same footprint as that for the Proposed Project. The operational differences between Alternative 4 and the Proposed Project would be the use of private aircraft instead of cargo airplanes, and that no air cargo would be transported to or from the project site, eliminating the movement of goods-distribution trucks to and from the project site. Because the same area of ground disturbance that would occur under the Proposed Project would occur under Alternative 4, implementation of mitigation measures related to air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, and noise, would be required under this alternative. Because Alternative 4 would introduce new uses within the MIP Airport Influence Area, Alternative 4 would also incorporate **MM-LU-1**. As such, Alternative 4 would result in **comparable land use and planning impacts** to the Proposed Project; impacts would be less than significant with mitigation incorporated.

Noise

As discussed in Section 3.11, Noise, once operational, the Proposed Project would result in less-than-significant impacts associated with exposure of workers to excessive noise relating to potential aircraft noise levels within the cargo building, with implementation of **MM-NOI-1** (Construction Worker Hearing Protection). **MM-NOI-1** requires the project applicant to provide evidence that the subject plans contain requirements with respect to contractor(s) providing employees with personal protective equipment per 8 CCR, Section 5096, and OSHA information (e.g., Publication 3498). The cargo aircraft flight operations of the Proposed Project would be **significant and unavoidable** even with the application of feasible mitigation, **MM-NOI-2** (Future Tenant Aircraft Fleet), which requires that prior to issuance of a certificate of occupancy a noise analysis be provided confirming that the proposed tenant's aircraft fleet mix would not exceed the noise levels disclosed in this EIR; absent such documentation, additional environmental review is required. Therefore, noise impacts due to Proposed Project aircraft operations would be significant and unavoidable even with the application of feasible mitigation. The Proposed Project would have less than significant impacts related to potential sleep disturbance from nighttime aircraft operations.

Under Alternative 4, the Private Aircraft Services Alternative, a private aircraft terminal facility would be constructed within the same building footprint as the cargo building proposed under the Proposed Project. The private aircraft terminal facility would be used to provide either a new operation or an expansion of the private jet service facilities located to the south of the project site to allow for an increase in the use of private jet services from MIP Airport. Development under this alternative would include construction of a tarmac and parking apron, allowing aircraft to access the terminal facility. This would include construction of a new taxiway (Taxilane J) that would provide aircraft access to the existing Taxiway A within March ARB. This alternative would also include an expansion of Taxiway G and construction of a parking apron adjacent to the western boundary of the terminal facility. The proposed tarmac expansion, Taxilane J, and parking aprons would be sized to accommodate private jet aircraft and would be paved to meet FAA standards. Access to the project site, as well as the terminal facility, would be constructed in the same manner as that proposed under the Proposed Project. In addition, all off-site work planned in the Proposed Project, including the work to be completed in Work Areas 1–5, as well as the work within the right-of-way along Heacock Street, would occur under this alternative. Construction of this alternative would likely rely on similar construction stages and heavy equipment, resulting in similar exposure to temporary construction noise levels and require implementation of **MM-NOI-1**.

Once operational, Alternative 4 would accommodate private aircraft, rather than commercial aircraft. In addition, because no air cargo facility would be constructed under this alternative, no air cargo would be transported to or from the project site, eliminating the movement of goods-distribution trucks to and from the project site. Noise generated from on-site operational noise sources (e.g., building mechanical equipment, trash pickup, heavy truck and loading dock activities), would be reduced in comparison to the Proposed Project. Annual flights under this alternative would remain the same as the Proposed Project; however, flight operations would not occur between the hours of 10:00 p.m. and 11:00 p.m. (approximately 5% of the Proposed Project's planned flight operations). The addition of the 10,608 private aircraft flight operations under this alternative would have the potential to result in aviation noise level increases of approximately 1 to 1.5 dB CNEL, which would remain below the relative increase thresholds and the absolute noise land use compatibility thresholds, and would therefore be **less than significant**. Thus, Alternative 4 would result in **reduced noise impacts** compared to the Proposed Project.

Transportation

As discussed in Section 3.12, Transportation, construction of the Proposed Project would result in VMT per employee of 23.12, which is below the WRCOG significance threshold of 25.47 VMT per employee (approximately 9.23% below the threshold). Therefore, the Proposed Project's VMT impact would be less than significant. Additionally, all other transportation-related impacts would be less than significant or less than significant with mitigation incorporated. The Proposed Project would incorporate **PDF-TRA-1** (Payment of Fair-Share Cost) and would include implementation of **MM-TRA-1** (Construction Traffic Management Plan) and **MM-TRA-2** (Project Truck Route on Heacock Street). **PDF-TRA-1** requires the Proposed Project to contribute its fair share toward intersection improvement measures. **MM-TRA-1** requires the applicant to develop and implement a project-specific CTMP approved by March JPA, and **MM-TRA-2** requires all Proposed Project truck traffic to utilize the Harley Knox Boulevard interchange at I-215 and the designated truck routes to the south of the project site. Overall transportation impacts under the Proposed Project would be less than significant with mitigation incorporated.

Under Alternative 4, the project site would be built out in the same manner as the Proposed Project, in that the private aircraft terminal facility would be constructed within the same footprint as that for the Proposed Project. The operational differences between Alternative 4 and the Proposed Project would be the use of private aircraft instead of cargo airplanes, and that no air cargo would be transported to or from the project site, thereby eliminating the movement of goods-distribution trucks to and from the project site. Alternative 4's employee count would be reduced

compared to the Proposed Project. Therefore, the employee trip generation rate would be less than that of the Proposed Project; however, this alternative's impact based on VMT would be less than significant, the same as the Proposed Project. In addition, the same as the Proposed Project, Alternative 4 would incorporate **MM-TRA-1** and **MM-TRA-2**. Therefore, due to the lack of goods-distribution truck traffic and reduced employee traffic, Alternative 4 would result in **reduced transportation impacts** compared to the Proposed Project.

Tribal Cultural Resources

As discussed in Section 3.13, Tribal Cultural Resources, buildout of the Proposed Project would result in less-than-significant impacts to TCRs with implementation of **MM-CUL-1** (Archaeological and Tribal Monitoring), which requires the project applicant/developer to retain a qualified tribal monitor to monitor all initial ground-disturbing activities. **MM-CUL-1** also requires the Proposed Project's qualified archaeological Principal Investigator to develop a CRMTP prior to Proposed Project commencement. Impacts related to tribal cultural resources that are listed or eligible for listing in the CRHR or in a local register of historical resources as defined in California Public Resources Code Section 5020.1(k) would be less than significant with mitigation incorporated.

Under Alternative 4, development within the project site would occur in a similar manner to that planned for the Proposed Project; thus, grading and excavation activities within the project area would occur. Therefore, Alternative 4 would result in the potential to disturb TCRs, requiring implementation of **MM-CUL-1**. With implementation of **MM-CUL-1**, Alternative 4 would result in a less-than-significant impact with mitigation incorporated, the same as the Proposed Project. Thus, Alternative 4 would result in the **same level of impacts to TCRs** as the Proposed Project.

Utilities and Service Systems

As discussed in Section 3.14, Utilities and Service Systems, the Proposed Project would have less-than-significant impacts to facilities providing water, wastewater, stormwater, electric power, natural gas, and telecommunications. There are sufficient water supplies available and wastewater treatment capacity to serve the Proposed Project, resulting in less-than-significant impacts. The Proposed Project would have no impact on solid waste infrastructure and capacity and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, resulting in less-than-significant impacts. Therefore, the Proposed Project's impacts to utilities and service systems would be less than significant and no mitigation is required.

Under Alternative 4, development within the project site would occur in a similar manner to that planned for the Proposed Project; Alternative 4 would have a reduced number of employees compared to the Proposed Project. Thus, Alternative 4 would result in less-than-significant impacts related to facilities providing water, wastewater, stormwater, electric power, natural gas, and telecommunications. Alternative 4 would require a reduced level of water and wastewater treatment capacity compared to the Proposed Project. In addition, Alternative 4 would result in a reduced amount of solid waste generated during the construction and grading process and the operation of the Proposed Project, thereby resulting in fewer impacts to solid waste. Therefore, Alternative 4 would result in a **reduced level of less-than-significant impacts** to utilities and service systems compared to the Proposed Project.

5.4.5.2 Project Objectives

Under Alternative 4, development of the project site would occur in a similar manner to the Proposed Project, as discussed in Chapter 2 of this EIR. However, with the change in use of the cargo building to a private aircraft terminal facility, the ultimate use would change, which would generate 52 jobs (reduced) and would not provide additional air cargo services to serve Southern California. The proposed Zoning Designation, Plot Plan, and all other applicable

pending approvals associated with the Proposed Project would continue to be necessary under this alternative. Table 5-10 provides a list of the project objectives and whether Alternative 4 meets each objective. As demonstrated in Table 5-10, Alternative 4 would meet five of the six project objectives.

Table 5-10. Alternative 4 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
<p>More fully utilize the operations capacity of the March Inland Port Airport to meet regional demands for air cargo services within Southern California and the greater region, thereby alleviating congestion and overtaxed air and roadway facilities within the greater region.</p>	<p>No. As discussed in the environmental analysis above, the project site would be built out with a private aircraft terminal facility, rather than an air cargo facility. Thus, no additional aviation operations would occur that would allow MIP Airport to meet regional demands for air cargo services. Because no additional air cargo facilities would be constructed, and no increase in capacity to handle air cargo demands would occur, Alternative 4 would not alleviate congestion and overtaxed air and roadway facilities within the greater region. As such, Alternative 4 would not achieve this project objective.</p>
<p>Provide appropriate land use intensities to comply with the parameters of the March Air Reserve Base/Inland Port Airport Compatibility Plan.</p>	<p>Yes. As discussed in the environmental analysis above, the project site would be constructed in the same manner as that planned under the Proposed Project and would provide a land use (aviation) that is consistent with the allowed uses of the March ARB/Inland Port ALUCP. The proposed Plot Plan associated with the Proposed Project would be implemented, resulting in the construction of a private aircraft terminal facility and tarmac extensions and improvements. Thus, Alternative 4 would result in the provision of a land use intensity (aviation facility) that would comply with the parameters of the March ARB/Inland Port ALUCP. As such, Alternative 4 would achieve this project objective.</p>
<p>Avoid impacts to, or impediment of, the remediation of the burn areas within Site 7.</p>	<p>Yes. Development of this alternative would have the same footprint as the Proposed Project and would avoid impacts to the burn areas of Site 7.</p>
<p>Provide increased job opportunities for local residents through the provision of employment-generating businesses.</p>	<p>Yes. Implementation of Alternative 4 would result in the anticipated generation of 52 jobs. Although this alternative would meet this project objective, it would do so to a lesser extent than the Proposed Project, which is expected to generate 150 jobs. Therefore, Alternative 4 would meet this project objective, albeit to a lesser extent than the Proposed Project.</p>
<p>Improve access for airport users to the existing taxiways.</p>	<p>Yes. Development of Alternative 4 would result in the same taxiway extensions and realignments planned under the Proposed Project to provide aircraft access from the project site to the existing taxiways within March ARB. Therefore, Alternative 4 would meet this project objective.</p>
<p>Facilitate development of aviation uses other than federal military aviation.</p>	<p>Yes. Implementation of Alternative 4 would result in the development of civil aircraft aviation uses, as allowed by the joint use agreement between March JPA and DAF. The total annual flights under this alternative would be consistent with the joint use agreement and Air Installations Compatible Use Zone terms. Therefore, Alternative 4 would meet this project objective.</p>

Notes: MIP = March Inland Port; ARB = Air Reserve Base; ALUCP = Airport Land Use Compatibility Plan; DAF = U.S. Department of the Air Force.

5.5 Environmentally Superior Alternative

As indicated in Table 5-1, Alternative 1, the No Project Alternative, would result in no environmental impacts and would be the environmentally superior alternative. However, it would not meet most of the project objectives, and Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR must also identify an environmentally superior alternative among the other alternatives.

Alternative 4, the Private Aircraft Services Alternative, would be the Environmentally Superior Alternative (refer to Table 5-1) because it would have the most reductions in impacts compared to the Proposed Project. Alternative 4 would accommodate private aircraft, rather than commercial aircraft, in contrast to the Proposed Project. Although Alternative 2, Nighttime Flight Noise Reduction, and Alternative 3, Reduced Flight Operations, would both meet all of the project objectives, in comparison to Alternative 4 (which would meet five of the six objectives), Alternative 4 would have reduced air quality and noise impacts. While Alternative 2 would reduce nighttime flight operations, the same number of annual flights would occur under this alternative as under the Proposed Project, resulting in the same level of air quality and noise impacts. Alternative 3 would reduce flight operations by 10% compared to the Proposed Project; however, air quality impacts would remain significant and unavoidable. Additionally, the ambient noise level increase that would occur under Alternative 3 would exceed the relative increase thresholds, resulting in noise impacts that would be similar to the Proposed Project. Alternative 4 would achieve most, but not all, project objectives and would have fewer impacts compared to Alternatives 2 and 3.

5.6 References Cited

March JPA (Joint Powers Authority). 2013. "Airport Layout Plan March Inland Port." September 2013. Accessed March 2023. https://www.marchjpa.com/documents/docs_forms/airport_docs/articles/airportlayoutplan.pdf.

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