CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Hollister Air Attack Base Relocation Project

Draft

Initial Study/Mitigated Negative Declaration

March 2025

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CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Hollister Air Attack Base Relocation Project

Draft Initial Study/Mitigated Negative Declaration

Prepared for:

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Montrose Environmental Solutions. 2025.
California Department of Forestry and Fire Protection. Hollister Air Attack Base Relocation Project –Draft Initial Study. March. (24.028.) Oakland, CA.

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Acronyms and Abbreviations

°F	Fahrenheit
A	
AB	Assembly Bill
ACE	areas of conservation emphasis
ADT	average daily traffic
AIA	airport influence area
ALUC	airport land use commissions
ALUCP	airport land use compatibility plan
APN	Assessor's Parcel Number
ARFF	aircraft rescue and fire fighting
B	
BAAQMD	Bay Area Air Quality Management District
BERD	Historic Property Directory, and the Built Environment Resource Directory
BMP	best management practice
C	
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Governor's Office of Emergency Services
Cal/OSHA	California Occupational Safety and Health Administration
CalARP	California Accidental Release Prevention
CalEPA	California Environmental Protection Agency
CALGreen	The California Building Standards Code (Title 24 of the California Code of Regulations [CCR]) – also known as
Caltrans	California Department of Transportation
CBC	California Building Code
CBIA	California Building Industry Association
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDOC	California Department of Conservation
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Ac
CFR	Code of Federal Regulations
CMU	concrete masonry units
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CUPA	Certified Unified Program Agency
CVH	Hollister Municipal Airport
CWA	Clean Water Act (Federal Water Pollution Control Act)
CWPP	community wildfire protection plan
cy	cubic yard

D

dB	decibel
dBA	A-weighted decibel
DGS	California Department of General Services
DPS	Distinct Population Segment
DTSC	California Department of Toxic Substances Control

E

F

F&G Code	California Fish and Game Code
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FHSZ	fire hazard severity zones
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration

G

GSA	sustainability agency

GSP	sustainability plan

H

HCP	Habitat Conservation Plan
HEPA	high-efficiency particulate air
HFD	Hollister Fire Department
Hollister AAB	Hollister Air Attack Base
Hz	Hertz

I

in/sec	inches per second
IPaC	Information for Planning and Conservation
IS/MND	initial study/mitigated negative declaration

J

K

km^2	square kilometer
kVA	kilovolt-amperes

L

L_{dn}	day-night sound level
L_{eq}	equivalent sound level
L_{max}	maximum sound level
L_{min}	minimum sound level
L_{xx}	percentile-exceeded sound level
LRA	local responsibility area

M

MBTA	Migratory Bird Treaty Act
MLD	most likely descendent
Montrose	Montrose Environmental
MRZ	mineral resource zone
MS4	municipal separate storm sewer system
MSL	mean sea level
mVA	mega volt-amperes

N

N.A.A.S.	navy air auxiliary station
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NEHRP	National Earthquake Hazards Reduction Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NPPA	Native Plant Protection Act
NRHP	National Register of Historic Places
NTU	Nephelometric Turbidity Unit
NWIC	Northwest Information Center

O

OHP	Office of Historic Preservation
OPS	operations
OSHA	Occupational Safety and Health Administration

P

PG&E	Pacific Gas and Electric Company
Porter-Cologne Act	California's Porter-Cologne Water Quality Control Act
PPV	peak particle velocity
Proposed Project or Project	Hollister Air Attack Base Relocation Project
Pub. Res. Code	Public Resource Code

R

RMP	risk management plan
RWQCB	Regional Water Quality Control Boards

S

SGMA	Sustainable Groundwater Management Act
SHMA	Seismic Hazards Mapping Act of 1990
SMARA	Surface Mining and Reclamation Act of 1975
SMS	safety management system
sq ft	square feet

SR	state route
SRA	state responsibility area
SVP	Society for Vertebrate Paleontology
SWPPP	stormwater pollution prevention plan
SWRC	State Water Resources Control Board

T

TCR	tribal cultural resource

U

U.C.R.	Uniform Crime Reporting
U.S.	United States
UCMP	University of California Museum of Paleontology
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFA	U.S. Fire Administration
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service

V

VdB	velocity in decibels
VMT	vehicle miles traveled
VPD	vehicles per day

W

WDR	waste discharge requirement
WQC	water quality certificate
WQO	water quality objectives
WRCC	Western Regional Climate Center

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Chapter 1
INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared for the California Department of Forestry and Fire Protection's (CAL FIRE) proposed Hollister Air Attack Base Relocation Project (Proposed Project). This IS/MND was prepared in accordance with California Environmental Quality Act (CEQA), under which the Proposed Project is evaluated at a project level (CEQA Guidelines § 15378). CAL FIRE, the CEQA lead agency, will consider the Proposed Project's potential environmental impacts when considering whether to approve the Project. This IS/MND is an informational document to be used in the planning and decision-making process for the Proposed Project and does not recommend approval or denial of the Proposed Project.

The site plans for the Proposed Project included in this IS/MND are conceptual. The final design for the Proposed Project may include some modifications to these conceptual plans, and the environmental analysis has been developed with conservative assumptions to accommodate some level of modification.

This IS/MND describes the Proposed Project; its environmental setting, including existing conditions and regulatory setting, as necessary; and the potential environmental impacts of the Proposed Project on or with regard to the following topics:

- Aesthetics
- Agriculture/Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

1.1 Public Involvement Process

Public disclosure and dialogue are priorities under CEQA. CEQA Guidelines Section 15073 and Section 15105(b) require that the lead agency designate a period during the IS/MND process when the public and other agencies can provide comments on the potential impacts of the Proposed Project. To provide input on this IS/MND, please send comments to the following contact:

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During its deliberations on whether to approve the Proposed Project, CAL FIRE will consider all comments received before 5:00 p.m. on the date identified in the public Notice of Intent to Adopt a Mitigated Negative Declaration.

1.2 Organization of this Document

This IS/MND contains the following components:

Chapter 1, *Introduction*, provides a brief description of the intent and scope of this IS/MND, the public involvement process under CEQA, and the organization of and terminology used in this IS/MND.

Chapter 2, *Project Description*, describes the Proposed Project including its purpose and goals, the site where the Proposed Project would be constructed, the construction approach and activities, operation-related activities, and related permits and approvals.

Chapter 3, *Environmental Checklist*, presents the checklist used to assess the Proposed Project's potential environmental effects, which is based on the model provided in Appendix G of the CEQA Guidelines. This chapter also includes a brief environmental setting description for each resource topic and identifies the Proposed Project's anticipated environmental impacts, as well as any mitigation measures that would be required to reduce potentially significant impacts to a less-than-significant level.

Chapter 4, *Preparers*, presents a list of individuals who assisted in preparing and/or reviewing the Initial Study.

Chapter 5, *References*, provides a bibliography of printed references, websites, and personal communications used in preparing this IS/MND.

Appendices

Appendix A. Local Plans and Policies
Appendix B. Air Quality and Greenhouse Gas Calculations
Appendix C. Biological Resources Report – Hollister Air Attack Base Relocation Project
Appendix D. Energy Calculations
Appendix E. Noise Calculations

1.3 Impact Terminology and Use of Language in CEQA

This IS/MND uses the following terminology to describe the environmental effects of the Proposed Project:

- A finding of *no impact* is made when the analysis concludes that the Proposed Project would not affect the particular environmental resource or issue.
- An impact is considered *less than significant* if the analysis concludes that no substantial adverse change in the environment would result and that no mitigation is needed.
- An impact is considered *less than significant with mitigation* if the analysis concludes that no substantial adverse change in the environment would result with the inclusion of the mitigation measures described.
- An impact is considered *significant or potentially significant* if the analysis concludes that a substantial adverse effect on the environment could result.
- *Mitigation* refers to specific measures or activities that would be adopted by the lead agency to avoid, minimize, rectify, reduce, eliminate, or compensate for an otherwise significant impact.
- A *cumulative impact* refers to one that can result when a change in the environment would result from the incremental impacts of a project along with other related past, present, or reasonably foreseeable future projects. Significant cumulative impacts might result from impacts that are individually minor but collectively significant. The cumulative impact analysis in this IS/MND focuses on whether the Proposed Project's incremental contribution to significant cumulative impacts caused by the project in combination with past, present, or probable future projects is cumulatively considerable.
- Because the term "significant" has a specific usage in evaluating the impacts under CEQA, it is used to describe only the significance of impacts and is not used in other contexts within this document. Synonyms such as "substantial" are used when not discussing the significance of an environmental impact.

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Chapter 2
PROJECT DESCRIPTION

This chapter describes the proposed Hollister Air Attack Base Relocation Project (Proposed Project or Project) and discusses the location, background, and need for the project; objectives; existing facilities; proposed project components, construction, and operation; anticipated permits and approvals; and best management practices (BMPs) that would be applied during construction and operation.

2.1 Overview

The California Department of Forestry and Fire Protection (CAL FIRE) plans to relocate the existing Hollister Air Attack Base (Hollister AAB) facilities to a 16.23-acre area within the Hollister Municipal Airport (CVH). The current air attack base facilities are located on the southeast end of CVH. With the Proposed Project, CAL FIRE proposes to relocate operations to about 550 feet west of the existing Hollister AAB.

The Proposed Project is necessary due to numerous facility inadequacies and because the existing facility no longer meets safety and operational needs (see more information in Section 2.2). CAL FIRE seeks to improve the Hollister AAB's core capabilities of emergency response, natural resources protection, and fire prevention and regulatory oversight.

2.1.1 Location

The Proposed Project would be located at CVH in the City of Hollister, San Benito County, California (Figure 2-1). The existing Hollister AAB facility is located 1,300 feet east of the proposed relocated facility site (Figure 2-2). The Proposed Project is within Assessor's Parcel Number (APN) 0500100010.

2.1.2 Surrounding Land Uses and Ownership

The project site is bordered to the north and east by the CVH runway; to the west by Hollister Fire Station 3; to the south by a vacant lot and a private warehouse/storage building on Aerostar Way and Airway Drive. The Hollister Wayside Park is located south of the existing Hollister AAB. The CVH is owned by the City of Hollister.

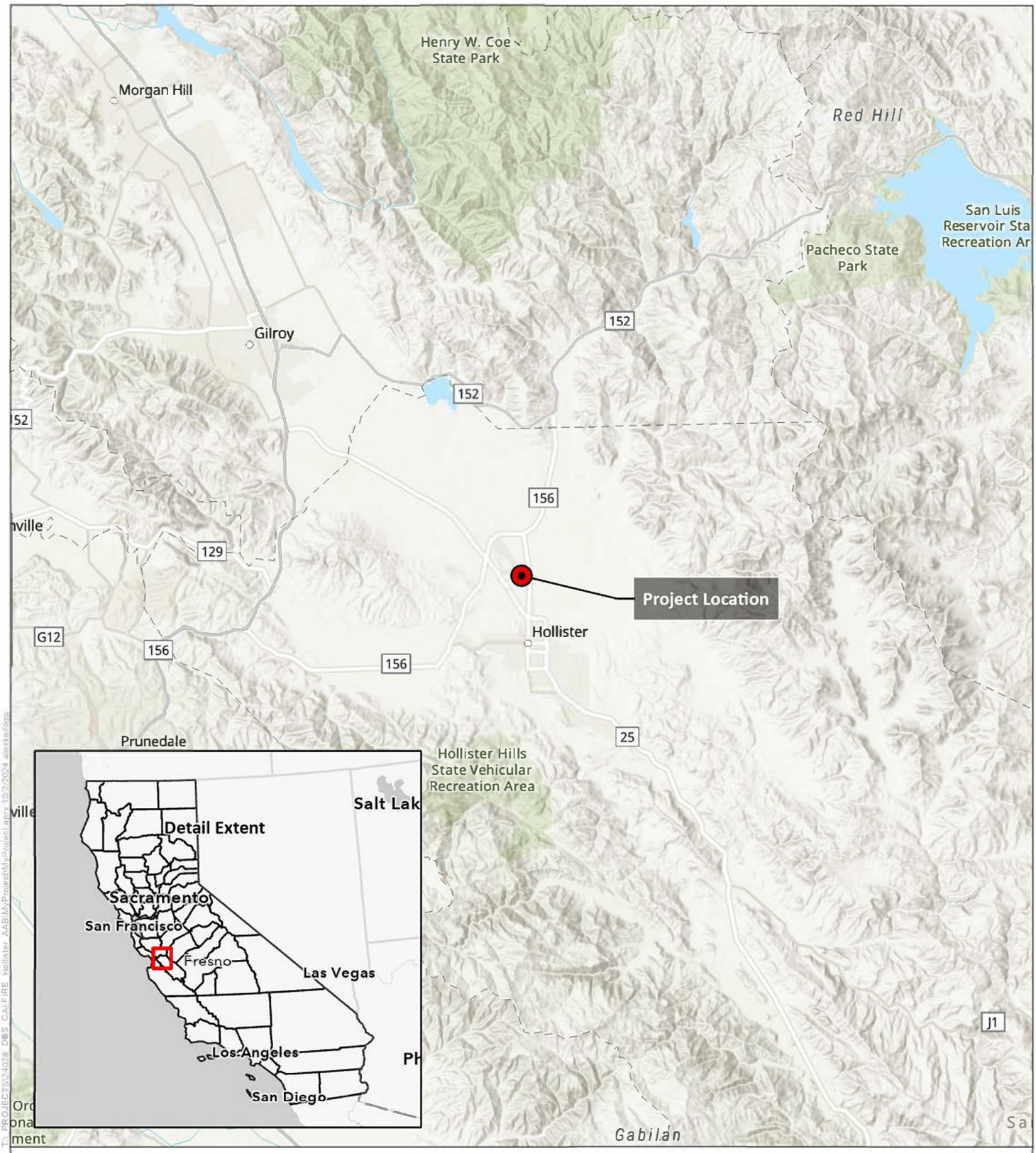

Figure 2-1
Project Vicinity

Project Location/ Study Area

N

0 5
Miles

CAL FIRE Hollister Air Attack Base Relocation Project

MONTROSE ENVIRONMENTAL

Source: Vivid Maxar Aerial Photography, 6/4/2021

Figure 2-2
Project Location Map

Proposed Hollister Air Attack Base

N

0 125 250 500 Feet

MONTROSE ENVIRONMENTAL

CAL FIRE Hollister Air Attack Base Relocation Project

T:_PROJECTS\24028_DGS_CalFire_Hollister\Pro Map Projects\CEQA FIGURES.aprx 12/5/2024 PG

2.2 Background and Need for the Project

2.2.1 Background

The existing Hollister AAB is located on a leased parcel at the CHV. The base is strategically located for quick initial attack to fires in high-value areas of the Monterey Peninsula; Santa Cruz Mountains; south San Francisco Bay area; southern fringes of the Oakland-Berkeley Hills; the remote areas of Monterey, Santa Clara, San Benito, Santa Cruz, Stanislaus, San Joaquin, Merced Counties; and the west side of Fresno County. The Hollister ABB is the primary fire control facility in the central coast fire protection system. The Hollister ABB's total protection area is 3,758,459 acres. Various firefighting agencies depend upon the use of this airbase, on a mutual aid basis, including the U.S. Forest Service, National Park Service, Bureau of Land Management, and California Department of Parks and Recreation, as well as local city and county fire control agencies.

The facility currently supports two S2-T air tankers and an air attack command and control aircraft. The mission of the airbase is to provide fixed-wing, aerial delivery of fire-retardant chemicals for use in initial attack on new fire starts, sustained suppression activities on major fires, and tactical air support. The facility is staffed year-round.

2.2.2 Project Need

CAL FIRE has determined that the existing Hollister AAB needs to be relocated for the following reasons:

- The paved pad area is inadequate to refuel aircraft separately from the retardant refilling pads. The condition also forces unsafe maneuvering of larger aircraft. It is hazardous for fuel trucks, air tankers, mechanics, loaders, and parking tenders to operate in such a tight area.
- The base has handled the reloading of up to 14 air tankers and parking for 13 while supporting multiple major incidents. At such times, the available space has not been adequate to maintain desired standards for the operating safety of an air base and efficiency in deployment of resources.
- The loading ramp is inadequate for larger tankers and large fire operations. Only Loading Pad 3 is available to reload Type II Air Tankers (large air tanker). This pad is situated so that any tanker on that pad cannot taxi to the runway if an air tanker is being loaded on Pad 2. The current reloading area reduces and delays CAL FIRE operations and diminishes the department's ability to carry out its primary mission.
- The existing asphalt is in poor condition and has been identified as a safety hazard during annual safety inspections. The asphalt has been seal/coated in the past but is now cracking and peeling. Loosened debris from the tarmac, parking, loading pit, and runway surfaces can be drawn into aircraft engines, ruining these engines, with repairs costing tens of thousands of dollars or more; this damage also puts the aircraft at risk of engine failure while the aircraft is airborne.
- CHV is an uncontrolled airport and the Federal Aviation Administration (FAA) does not require the use of radios by private aircraft. Private aircraft have often landed on

Runway 24 with no radio communications, causing “near misses” for air tankers and air attack aircraft departing Runway 31.

- There is no hangar at the Hollister AAB for the air attack aircraft; therefore, the aircraft are stored outside, exposed to heat and moisture. When the aircraft are due for routine maintenance, the mechanic must perform the work after dark, with poor lighting and working conditions. The aircraft must be available for emergency response and cannot be out of service during the daytime.

Due to the facility inadequacies and deteriorating conditions mentioned above, it is proposed to relocate the Hollister AAB operations to improve efficiency and safety.

2.3 Project Objectives

CAL FIRE proposes to relocate the existing Hollister AAB with the objective to improve existing emergency response capabilities. The objectives of the Proposed Project are as follows:

- Improve core capabilities of emergency response;
- Provide protection of natural resources from wildfire; and
- Provide wildfire prevention.

2.4 Existing Facilities and Operations

2.4.1 Facilities

The existing Hollister AAB is on 4.5acres of leased land within the CVH. The Hollister AAB is the primary fire control facility and currently houses two S2-T air tankers and an air attack command and control aircraft. The mission of the air base is to provide fixed-wing, aerial delivery of fire retardant chemicals for use in initial attack on new fire starts, sustained suppression activities on major fires, and tactical air support. The existing facility houses a control building, office/breakroom area, fire retardant tanks, repair building, and dorms. The facility utilizes a small hangar (owned by others) for repairs.

2.4.2 Operations

The Hollister AAB facility is staffed year-round. It houses four aircraft: two S2-T air tankers, one OV-10 aircraft, and one S-70 Firehawk helicopter. The Hollister ABB is used for helicopter training approximately 140 days a year. It is operated by 22 employees for 24 hours a day, 7 days a week. Currently, CVH operations require that the Firehawk helicopter land in an open field across the runway from the existing base. The existing Hollister ABB facility mixes approximately 40,000 gallons of retardant per year.

2.5 Proposed Project

The Proposed Project would involve the construction of new facilities on 16.23 acres adjacent to the existing facilities, including a 32-bedroom dormitory, office buildings, air control tower, three-bay storage, hangers, S2-T canopies, helicopter training tower, and retardant mixing station (see more detailed description in Section 2.5.1).

Additionally, the Proposed Project would include construction of taxiway paving to allow access to existing runway and taxiways, fire retardant pad with equipment and trenching supply lines to pits, underground storm-drain containment tanks, helipads, parking areas, and fencing. Conceptual locations of project facilities are indicated in **Figure 2-3**.

Future facilities are evaluated in this document, however funding for these facilities have not been secured. Therefore, construction potential and timing of these future facilities is unknown at this time.

Figure 2-3. Conceptual Site Plan

Building Number	Building Name	Area (SF)	Occupancy	# of Stories	Type of Construction	Notes
1	Hangar	14,400	S-1	1	II-B	Essential Services Building
2	Dormitory	8,844	R-2	1	V-B	17 Bedrooms + 34 Occupants
3	Training Tower	400	U	3	V-B	
4	OPS	4,520	B	2	V-B	Essential Services Building
5	Retardant Plant	n. rm	S-1	-	II-B	Uncovered slab; equipment in essential services
6	Apparatus & Warehouse	4,765	S-1	1	II-B	
7	Covered Aircraft Parking	4,666	S-1	1	II-B	
8	Covered Aircraft Parking	4,666	S-1	1	II-B	
9	Covered Garbage Enclosure	-	-	-	-	Not a building
10	Communications Tower	-	-	-	-	Not a building; Essentia Services Building
11	Future Office	3,150	B	1	V-B	Not Funded - Future Building
12	Repair Shop	12,709	H-2	1	II-B	Not Funded - Future Building
13	Haz Mat Stor	262	H-2	1	II-B	Not Funded - Future Building
14	Covered Fire Pump Test Pit	1,344	H-2	1	II-B	Not Funded - Future Building
15	Water Tower	-	-	-	-	Not a building - Not Funded; Essential Services Building
16	Vehicle Fueling Station	-	-	-	-	Not a building - Not Funded
17	Emergency Generator	1,527	S-1	1	II-B	Essential Services Building; Not Funded - Future Building
17A	Fire Pump	400	S-1	1	II-B	Essential Services Building; Not Funded - Future Building
18	Gym Building	1,200	B	1	II-B	Not Funded - Future Building
19	Office Building	3,150	B	1	V-B	Not Funded - Future Building
20	Communications Equipment	300	B	1	V-B	Essential Services Building; Not Funded - Future Building

2.5.1 Proposed Project Facilities

The following facilities would be constructed as the initial phase of construction of the Proposed Project. The Proposed Project would install several essential service buildings, which are any buildings, or any portion of a building which is used or designed to be used as a fire station, police station, emergency operations center, California Highway Patrol office, sheriff's office or emergency communication dispatch center.

- Communications Tower – The tower would be a maximum of 35 feet tall and would allow air traffic and ground staff to communicate during critical air operations. The communication tower is located next to the Operations Building.
- Dormitory/Barracks – A 32-bed barracks (8,844 square feet [sq ft]) would replace the existing modular units. The building would be one story tall with 17 bedrooms. This building is an essential services building. The dormitory roof would be prefinished standing seam metal roofing with insulated glazing aluminum window frames. The exterior of the building would be painted, and would have textured exterior plaster.
- Apparatus and Warehouse Building – A 4,765-sq ft apparatus and warehouse building would house a three-bay parking area for aircraft support vehicles and a warehouse for storage of fire retardant and miscellaneous equipment. The roof would have skylights over the 3-bay vehicle parking area, and be made of pre-engineered metal. .The buildings exterior walls will be split faced concrete masonry unit with wainscotting- a wood panelling applied to the lower portion of the wall. The building would be 25 feet tall. This building is considered an essential services building.
- Hangar – The 14,400-sq ft hangar would provide secure storage and weather protection for aircraft. The hanger would be 44 feet tall and also includes other rooms such as an electrical room, storage room, repair shop, restroom, compressor, and storage room. The hanger would have a steel framed roof and hydraulic operated hangar doors. The buildings exterior walls will be split faced concrete masonry unit with wainscotting- a wood panelling applied to the lower portion of the wall. The hangar is considered an essential services building.
- Covered Aircraft Parking Areas – Two separate weather-protective covered parking areas of approximately 4,666 sq ft each would be provided for S2-T air tankers. The covers would provide weather protection and light maintenance areas for these aircraft during fire season. The roof would have skylights and be made of pre-engineered metal with gutters.
- Training Tower – A five-level training tower (406 sq ft) would be used for helicopter rescue training. The tower would have a hoist system for rappelling training. The training tower would have winch support columns, guardrails, and a simulated firehawk helicopter cab. The hoist would have 500 lbs of lifting capacity.
- Operations Building – A two-story Operations (OPS) building (approximately 4,520 sq ft) would house about 24 rooms that dispatch and directs aircraft operations. The building would support operations of the AAB and is considered an essential services building. The building's occupant load is 34 individuals. The building's roof would be prefinished standing seam roof with prefinished gutters to match the painted textured exterior plaster finish.
- Retardant Plant and Storage Tanks – A retardant mixing station would be constructed with two 25,000-gallon aboveground retardant storage tanks, one 16,000-gallon

retardant bulk-bag mixing system, one 12,000-gallon off-load tank, and loading pumps rated for simultaneous loading of aircraft. Additionally, there is provisions to add two additional storage tanks of 25,000 gallons each for a grand total of 100,000 gallons.

- The retardant plant would occupy 6,720 sq ft. Loading pumps are rated for simultaneous loading of aircraft at 500 gallons per minute.
- Helipads – Two helipads, each approximately 10,000 sq ft, would be paved for helicopter landing and takeoff.
- Parking – A 50-vehicle parking lot would be constructed, along with truck loading and turn-around areas.
- Utilities – The Proposed Project would also include installation of water, electricity, fiber optic cable, reclaimed water, storm drain, sanitary sewer, domestic water, and fire suppression water. These utilities would require trenching to install the various pipelines, which would connect to existing utilities. Pipelines would be made of reinforced concrete, and sizes would vary; however, the largest pipe is not expected to exceed 24 inches in diameter.
- Ancillary Improvements – The Proposed Project would also include fencing, paving, landscaping, and other appurtenances.

In addition to the initial phase of construction, CAL FIRE is proposing to develop the following additional facilities at the Hollister AAB in the future.

- Office Building – Two additional one-story office buildings are proposed. Each building would be 70 feet long by 45 feet wide by 20 feet tall (3,150 sq ft). The exterior of the buildings would have stucco plaster walls with metal standing-seam roofs, and windows would include 1-inch insulated glazing in aluminum frames.
- Repair Shop – A one-story repair shop would be constructed. The building would be 44 feet wide by 178.5 feet long by 34 feet tall (12,709 sq ft). The exterior would have stucco plaster walls with metal standing-seam roofs, and windows would include 1-inch insulated glazing in aluminum frames.
- Hazardous Material Storage – A one-story storage building for hazardous materials would be constructed. The building would be 16 feet wide by 16 feet long by 16 feet tall (262 sq ft). The exterior would have stucco plaster walls with metal standing-seam roofs.
- Covered Fire Pump Test Pit – The Proposed Project would include a covered fire pump test pit, which would be used to test the pumps on fire engines, trucks, and water tenders. The covered pit would have a metal standing-seam roof and no exterior walls. The covered area would be 16 feet wide by 40 feet long by 16 feet tall (1,344 sq ft).
- Water Tower – A metal water tank with a metal roof is proposed. It would be 20 feet tall by 40 feet in diameter, with a capacity of 150,000 gallons.
- Vehicle Fueling Station – The Proposed Project would include a vehicle fueling station that is 25.5 feet wide by 35 feet long by 6 feet tall. The vehicle fueling station would have no walls or roof and would have slab-mounted fueling equipment.
- Emergency Generator and Storage – The Proposed Project would include an emergency generator sized at 1 megavolt-amperes (mVA) or 1,000 kilovolt-amperes (kVA). The generator would be 10-15 feet in length, about 4-6 feet in width, and about 6-8 feet in height. The generator would be stored in a storage building built of concrete masonry

units (CMU) that would be 40 feet wide, 41.5 feet long, and 16 feet tall (1,527 sq ft) with a metal standing-seam roof. On average, a 1,000-kVA generator consumes about 70-75 gallons of diesel fuel per hour at full load. With a 500-gallon fuel tank, the generator would run for approximately 6.5-7 hours at full load.

- Fire Pump – The Proposed Project would include installation of a fire pump that would be housed in a stand-alone building, 20 feet wide by 20 feet long by 16 feet tall (400 sq ft). The building would have CMU walls and a metal standing-seam roof. This building would be considered an essential services building.
- Gym Building – A gym is proposed for staff use that would 30 feet wide by 40 feet long by 16 feet tall (1,200 sq ft). The building would be one story and the exterior would be stucco plaster walls with metal standing-seam roofs.
- Communications Equipment – The Proposed Project would include a communication equipment building adjacent to the communications tower to house critical communications equipment. The building dimensions would be 12 feet wide by 24 feet long by 16 feet tall (about 300 sq ft).The one-story building would have CMU walls and metal standing-seam roof.

2.5.2 Construction

Staging Areas

Construction equipment is anticipated to remain on site during excavation and construction activities. There is adequate site area to accommodate construction trailers, contractor lay-down areas, and construction equipment parking. Staging would mainly occur in the area that is designated for the future repair shop (Figure 2-3). The selected area(s) would be fenced and gated.

Construction Methods

Site Preparation and Earthwork

Site preparation would include clearing and grubbing, excavation, import and placement of fill, and compaction. Clearing and grubbing would be conducted with standard excavators, bulldozers, and hand labor. All debris would be disposed of off-site at an appropriate location selected by the construction contractor. For the purposes of this analysis, the disposal site is assumed to be located within a 1-hour drive from the project site.

To the extent feasible, excavated soil may be reused onsite. If fill is required, it would be delivered to the building sites by conventional haul trucks (approximately 15 cubic yards [cy] per load). Fill material would be placed with an excavator and compacted with a compactor/roller.

Concrete would be brought in using a ready-mix truck to construct building floors, aprons, and site paving.

Buildings and Structures

Construction of buildings and structures would include the following activities:

- Delivery of concrete, forming and placement, and rebar placement;

- Structural steel work (assembly and welding);
- Electrical/instrumentation work;
- Masonry and metal stud framing and metal siding;
- Metal roof with rigid insulation;
- Installation of aboveground retardant storage tanks; and
- Installation of mechanical equipment and piping; and
- Delivery of precast concrete stormwater modules.

Construction of buildings and structures would require trenching to connect pipes, wiring, and utilities to existing connections (see trenching details below). The retardant storage tanks, pump, and mixing equipment would all be above ground; however, piping would be located in a covered yet accessible trench that extends from the mixing area to the pits.

Pipelines, Underground Utilities, and Stormwater Capture Modules

Drainage, water supply, and wastewater pipelines; stormwater capture modules (below grade); and underground utilities would be installed in open trenches, typically using conventional cut-and-cover construction techniques. The first step in the construction process is surface preparation, including removing any structures, pavement, or vegetation from the surface of the trench area using jackhammers, pavement saws, mowing equipment, graders, bulldozers, front-end loaders, and/or trucks. A backhoe, track-mounted excavator, or similar equipment would then be used to dig trenches for pipe, underground utility installation, or below-grade stormwater capture modules to prevent them from becoming a place for birds to gather. The width of the trench for pipelines and buried utilities would generally vary between 3 and 6 feet wide and the depth would be three times the pipeline diameter. The diameter of pipelines would vary by material type and purpose, with the largest pipe not expected to exceed 24 inches in diameter.

The precast stormwater capture modules would be 7 feet wide by 15 feet long by 6 feet in height. The width of the excavation for the stormwater capture modules would 7 feet wide by 15 feet long by 6 foot deep. 98 stormwater modules would be installed under the plane loading area and would capture and store stormwater in tanks. The water would be regulated with a pipe, which would convey overflow water to existing stormwater systems on Aerostar Way, south of the project area. All pipelines, utilities, and stormwater capture modules would connect to existing pipes/cables on unnamed road which is perpendicular to Aerostar Way, south of the Project area.

In most locations, trenches would likely have vertical sidewalls to minimize the amount of soil excavated and the area needed for the construction easement. Soil excavated from the trench would be stockpiled alongside the trench or in staging areas for later reuse in backfilling the trench or for fill at other on-site locations, if appropriate. Native soil would be reused for backfill to the greatest extent possible; however, it may not have the properties necessary for compaction and stability. If not reusable, the soil would be hauled off-site for disposal at an appropriate disposal site. The grading design would balance the site as much as possible, with approximately 750 cy anticipated to be disposed of off-site.

For trenches that are 5 feet or more deep, shoring would be required to protect workers from trench failure and cave-ins. Trench shoring may be generally accomplished by use of either

support structures, such as a shield or trench box, or speed-shores, which consist of two steel plates braced against opposing trench walls (generally by a hydraulic mechanism). Once the trench is secure, the pipelines are then installed.

During construction, vertical-wall trenches would be temporarily closed at the end of each workday, either by covering with steel plates or backfill material or by installing fences to restrict access for wildlife and/or unauthorized individuals.

Once pipelines are installed, trenches would then be backfilled and compacted. Dump trucks would deliver stockpiled or imported backfill material to the trenching operation. Backfill material would typically be placed in layers around and over the pipes. A vibratory compactor would then compact and consolidate the fill material. This process would be repeated in approximately 6-inch layers until the trench is filled to its original level. The final layer, immediately below the ground surface, may consist of crushed aggregate base material of sufficient depth to allow areas to be repaved.

The final step in the installation process would be to restore the ground surface. Site restoration would generally involve paving, installing landscaping, and/or installing erosion controls, as necessary.

Construction Equipment and Personnel

Construction crew on site will vary with the peak work resulting in approximately 70 total workers per day. That would be approximately 20 builing workers, 10 plumers, 15 electricians, and 15 miscellanous crew members. The main pieces of equipment that may be used are as follows:

- track-mounted excavator
- small crane
- end dump truck
- ten-wheel dump truck
- paving equipment
- flat-bed delivery truck
- concrete truck
- grader
- bulldozer
- backhoe
- compactor
- front-end loader
- water truck
- forklift
- compressor/jack hammer
- mowing equipment (e.g., weedeater, commercial lawnmower)
- boom truck

Construction Schedule

Construction of the Proposed Project is anticipated to last for approximately 27 months and would begin during the last quarter of 2027.

Construction activities would typically be performed Monday through Friday between 7 a.m. and 6 p.m. After-hours work and work on Saturdays, Sundays, and State holidays would require approval from the State of California.

2.5.3 Operations and Maintenance

The main operations for the Proposed Project would remain the same as operations at the current site under existing conditions: refueling, retardant loading of fixed-wing aircraft, and flight operations for the Firehawk helicopter.

The primary change to existing operations would be the housing of staff on base with the installation of a new 32-bed barracks. Additional added features would include canopies and hangers for both helicopter and fixed-wing aircraft, a dedicated helipad for landing the Firehawk, an Air Operations building with communications tower and antenna, and a site-wide emergency generator to facilitate 24-hour, 7-day-a-week operations that require nighttime operations. An increase in the quantities of retardant mixture is anticipated, along with increased days of training and a larger number of parked cars on site.

Table 2-1 summarizes the incremental changes to operations at the Hollister AAB that would result from the Proposed Project.

Table 2-1. Incremental Change in Operations with Proposed Project

Operational Characteristic	Existing Operations	Proposed Operations	Incremental Change
Number of aircraft	4	4	0
Aircraft type	4 aircraft type: S2-T Tankers (2) OV-10 (1) S-70 Firehawk helicopter (1)	S2-T Tankers (2) OV-10 (1) S-70 Firehawk helicopter (1)	0
Gallons of retardant per year	40,000 gallons per year	100,000 gallons per year	60,000 gallons per year
Operational hours	24 hours, 7 days a week	24 hours, 7 days a week	0
Days of training using helicopters	140 days	200 days	60 days
Maximum flight hours per day	7 hours per day	7 hours a day, 5 hours at night	5 hours night
Staff members on site	22	22	0
Vehicles on site	30	50	20

2.6 Anticipated Permits and Approvals

Table 2-2 identifies potential permits and approvals that may be required for the Proposed Project.

Table 2-2. Anticipated Regulatory Permits, Approvals, and Consultations

Agency	Permit / Approval / Consultation
Federal Agencies	
Federal Aviation Administration (FAA)	Any construction at an airport requires FAA approval to ensure it does not interfere with airport operations.
State Agencies	
California Department of Fish and Wildlife	Approval may be required if there is incidental take of any state-listed species.
Native American Heritage Commission	Letters were sent to tribes on October 29, 2024, to initiate the Assembly Bill AB 52 tribal consultation process.
Regional Agencies	
Monterey Bay Air Resources District	Consultation may be required to confirm compliance with the district's Air Quality Attainment Plan. Approval of a permit to operate excavators and other equipment may be required.
Local Agencies	
Not applicable to State Agency such as CAL FIRE.	

2.7 Best Management Practices

Below are Best Management Practices (BMPs) identified for the Proposed Project.

Table 2-3. Best Management Practices Applicable to the Proposed Project

Number	Title	Description
BMP-1	Area of Disturbance	Ground disturbance will be kept to the minimum footprint necessary to complete construction of Proposed Project.
BMP-2	Erosion and Sediment Control	▪ At no time will silt-laden runoff be allowed to enter the waterway or directed to where it may enter the waterway. Silt control features will be monitored for effectiveness and will be repaired or replaced as needed. ▪ Erosion control measures will be installed according to manufacturer's specifications. Appropriate erosion control measures include, but are not limited to, the following: fiber rolls, silt fences, straw bale barriers, erosion control blankets and mats, and soil stabilization measures (e.g., tackified straw with seed, jute blankets, broadcast, and hydroseeding). ▪ Erosion control fabrics will consist of natural fibers that will biodegrade over time and are wildlife friendly. No plastic or other non-porous material will be used as part of a permanent erosion control approach. Plastic sheeting may be used to temporarily protect a slope from runoff. ▪ All temporary construction-related erosion control methods (e.g., silt fences) will be removed at the completion of construction. ▪ All soils disturbed or exposed during construction activities will be seeded and stabilized using erosion control measures, such as erosion control fabric or hydromulch, or re-planted. Areas below the ordinary high-water mark are exempt from this BMP.
BMP-3	Fill, Spoils, and Stockpiled Materials	Temporary fill materials, excavated spoils that have not yet been hauled offsite, and stockpiled material will be isolated with silt fence, filter fabric, and/or straw bales/fiber rolls. Silt fence and/or fiber rolls will be placed at any locations where work could result in loose sediment that could enter any waterways The silt fence/fiber rolls will be maintained and kept in place for the duration of the Project. Any sediment or debris captured by the fence/rolls will be removed before fence/rolls are pulled.
BMP-4	On-site Hazardous Materials Management	▪ An inventory of all hazardous materials used (and/or expected to be used) at the worksite and the end products that are produced (and/or expected to be produced) after their use will be maintained by the worksite manager. ▪ As appropriate, containers will be properly labeled with a "Hazardous Waste" label and hazardous waste will be properly recycled or disposed of offsite. ▪ Exposure of chemicals to precipitation will be minimized by storing chemicals in watertight containers or in a storage shed (completely enclosed), with appropriate secondary containment to prevent any spillage or leakage. ▪ Petroleum products, chemicals, cement, fuels, lubricants, and non-storm drainage water or water contaminated with the aforementioned

Number	Title	Description
		materials will not contact soil and will not be allowed to enter surface waters. ▪ All toxic materials, including waste disposal containers, will be covered when they are not in use, and located as far away as possible from a direct connection to the storm drainage system or surface water. ▪ If hazardous materials are encountered at the Project site, the construction contractor will remove and dispose of them according to the Spill Prevention and Response Plan (refer to BMP-5).
BMP-5	Spill Prevention and Response Plan	To minimize the potential adverse effects due to the release of chemicals, fuels, lubricants, and non-storm drainage water into waterways, the CAL FIRE or the construction contractor will develop a Spill Prevention and Response Plan to be implemented by the contractor and all field personnel. The plan will contain guidelines for cleanup and disposal of spilled and leaked materials at the Project site. The plan will include, but not be limited to, the following measures: 1. Contractor's designated field personnel will be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills. 2. Equipment and materials for cleanup of spills will be available onsite, and spills and leaks will be cleaned up immediately and disposed of according to the following guidelines: a. For small spills on impervious surfaces, absorbent materials will be used to remove the spill, rather than hosing it down with water. b. For small spills on pervious surfaces such as soil, the spill will be excavated and properly disposed of rather than being buried. c. Absorbent materials will be collected and disposed of properly and promptly. 3. Field personnel will ensure that hazardous materials are properly handled and natural resources are protected by all reasonable means. 4. Spill response kits will be on hand at all times while hazardous materials are in use (e.g., at crew trucks and other logical locations). All field personnel will be advised of these locations. 5. The contractor will routinely inspect the worksite to verify that spill prevention and response measures are properly implemented and maintained.

Number	Title	Description
BMP-6	Vehicle and Equipment Maintenance	▪ Incoming equipment will be checked for leaking oil and fluids. ▪ All vehicles and equipment will be kept clean. Excessive build-up of oil and grease will not be permitted. ▪ Vehicle and equipment washing can occur onsite only as needed to prevent the spread of sediment, pathogens, or exotic/invasive species. No runoff from vehicle or equipment washing will be allowed to enter water bodies without being subjected to adequate filtration (e.g., vegetated buffers, hay wattles or bales, and silt screens). Other proper trackout systems can be used to prevent the spread of sediment from the site.
BMP-7	Dust Management Controls and Air Quality Protection	The contractor will implement the following applicable Construction Mitigation Measures to reduce emissions of fugitive dust and equipment exhaust: ▪ All haul trucks transporting soil, sand, or other loose material offsite will be covered. ▪ All vehicle speeds on unpaved roads will be limited to 15 miles per hour. ▪ Idling times will be minimized either by turning equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure [13 California Code of Regulations Section 2485]). ▪ All construction equipment will be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation.
BMP-8	Work Site Housekeeping	The contractor will maintain a neat and orderly worksite and properly dispose of all trash on a daily basis. Following construction, all construction debris will be removed from the work area.
BMP-9	Minimize Spread of Weeds and Invasive Species	▪ Invasive exotic species that occur within the Project site will be removed and properly disposed of offsite during initial site preparation and grading. ▪ All erosion control materials used onsite, such as straw wattles, mulch, and fill material, will be certified weed free. ▪ All revegetation efforts will include only local plant materials native to the Project site.
BMP-10	Reuse of Spoils	▪ To the extent practicable, reuse spoils onsite.

Notes: BMP = best management practice; Project = Hollister Air Attack Base Relocation Project

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Chapter 3
ENVIRONMENTAL CHECKLIST

This chapter of the Initial Study/Mitigated Negative Declaration (IS/MND) assesses the environmental impacts of the Hollister Air Attack Base Relocation Project (Proposed Project) based on the environmental checklist provided in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The environmental resources and potential environmental impacts of the Proposed Project are described in the individual subsections below. Each section includes a discussion of the rationale used to determine the significance level of the Proposed Project's environmental impact for each checklist question. For environmental impacts that have the potential to be significant, mitigation measures are identified that would reduce the severity of the impact to a less-than-significant level.

1.	**Project Title**	Hollister Air Attack Base Relocation Project
2.	**Lead Agency Name and Address**	California Department of Forestry and Fire Protection (CAL FIRE) 1131 S Street Sacramento, CA 95811
3.	**Contact Person, Phone Number, and Email**	Stephanie Coleman, Senior Environmental Planner California Department of General Services (DGS) 916-376-1602 stephanie.coleman@dgs.ca.gov
4.	**Project Location and Assessor's Parcel Numbers (APNs)**	60 Airport Drive, Hollister, CA 95023 APN 0500100010
5.	**Property Owner(s)**	City of Hollister
6.	**General Plan Designations**	Airport
7.	**Zoning**	Airport
8.	**Description of Project**	See Chapter 2, *Project Description*
9.	**Surrounding Land Uses and Setting**	The project site is bordered to the north and east by the Hollister Municipal Airport runway; to the west, the site is bordered by Hollister Fire Station 3; to the south, the project site is bordered by a vacant lot, and a private warehouse/storage building on Aerostar Way and Airway

	Drive. The County zoning is “agricultural productive.” The airport is mainly surrounded by agricultural land use.
10. Other Public Agencies Whose Approval or Input May Be Needed	U.S. Fish and Wildlife Service; California Department of Fish and Wildlife; Native American Heritage Commission; Central Coast Regional Water Quality Control Board; Monterey Bay Air Resources District; San Joaquin Valley Air Pollution Control District; San Benito County.
11. Hazards or Hazardous Materials	The Proposed Project is not located on the Department of Toxic Substances Control lists enumerated under Section 65962.5 of the Government Code, including, but not limited to, lists of hazardous waste facilities.
12. Native American Consultation	No tribes with a traditional and cultural affiliation to the project area have requested consultation. However, in the spirit of compliance with Public Resources Code (Pub. Res. Code) Section 21080.3.1, local tribes who were identified by the Native American Heritage Commission as having a traditional and cultural association with the project area were notified about the Proposed Project via letters dated October 29, 2024. Follow-up emails were sent on November 5, 2024. The Amah Mutsu Tribal Band of Mission San Juan Bautista provided a letter of response with recommendations from most likely descendant.

The environmental resources and potential environmental impacts of the Proposed Project are described in the individual subsections below. Each section (3.1 through 3.20) provides a brief overview of regulations and regulatory agencies that address the resource and describes the existing environmental conditions for that resource to help the reader understand the conditions that could be affected by the Proposed Project. In addition, each section includes a discussion of the rationale used to determine the significance level of the Proposed Project’s environmental impact for each checklist question. For environmental impacts that have the potential to be significant, mitigation measures are identified that would reduce the severity of the impact to a less-than-significant level.

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by the Proposed Project, as indicated by the checklist on the following pages.

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

Determination

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of sources of information cited in this document, the comments received, and conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and, where necessary, a visit to the site.

On the basis of this initial evaluation:

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

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

☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.

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

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

Signature DocuSigned by: John Melvin 6569EF653A04422... Date 2/26/2025

Name: John Melvin, Deputy Director
Resource Protection and Improvement
California Department of Forestry and Fire Protection

3.1 AESTHETICS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized 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 publicly accessible vantage point). If the project is in an urbanized area, would the project 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?	☐	☒	☐	☐

3.1.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies related to aesthetics are applicable to the Proposed Project.

State Laws, Regulations, and Policies

California Scenic Highway Program

The California Scenic Highway Program was established through Senate Bill 1447 (Farr) in 1963 to preserve and enhance the natural beauty of California (California Department of Transportation [Caltrans] 2008). This bill added Sections 260 through 263 to the Streets and Highways Code, which places the Scenic Highways Program under the jurisdiction of Caltrans. The program is composed of a list of designated and eligible highways, a process by which designation may occur, a process by which designation may be withdrawn, and coordinators who review and recommend eligible highways for designation to the Caltrans Director. Scenic highways are evaluated for inclusion based on whether a landscape demonstrates natural scenic

or agricultural beauty, whether existing visual intrusions significantly impact the view, whether there is strong local support, and whether the length of the highway is longer than a mile.

Local Laws, Regulations, and Policies

CAL FIRE is the lead agency for the Proposed Project; therefore, local aesthetic regulations do not apply to the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only. Local laws, regulations, and policies are found in Appendix A.

3.1.2 Environmental Setting

Visual Character and Quality of the Site

The Proposed Project location is in the city of Hollister. The project area is primarily undeveloped open space and is largely defined by its proximity to the Hollister Municipal Airport.

The project site is bordered to the north and east by airport runways and related development, and to the south by roads, undeveloped open space, and industrial buildings. West of the project site is undeveloped open space, Hollister Fire Station 3, and an existing industrial building.

Light and Glare

There are few existing sources of light and glare within the project area. Sources of light may include safety lighting for the existing airport operations, and lighting from vehicles and helicopters in the area. Sources of glare include reflections from glass and metal vehicle surfaces. The neighboring airport operations would be a source of light and glare, though both would be controlled for aviation safety purposes.

Scenic Classifications, Scenic Highways, Corridors

There are no designated state scenic highways or federal scenic byways in the project area (Caltrans 2018). However, Highway 156 to the north and Highway 25 to the west, both within a mile of the project site, are both classified as “eligible” for future scenic designation (Caltrans 2018).

Viewer Groups and Sensitivity

The primary viewers of the site would be nearby residents, passing motorists, and employees and users of the Hollister Municipal Airport.

Due to proximity and duration of time spent in the area, it is expected that employees and users of the Municipal Airport and local residents would be most sensitive to changes to the viewshed. It is expected that views of the project site for passing motorists from roadways would be limited due to topography, existing development, and distance from the project site. When also taking into consideration the speed of travel for passing motorists, it is expected they would be the least sensitive group to changes to the viewshed.

3.1.3 Discussion of Checklist Responses

a. Adverse effects on scenic vistas—No Impact

A scenic vista is generally considered a view of an area that has remarkable scenery or a natural or cultural resource that is indigenous to the area. Presently, there are no designated scenic vistas near the project site. Therefore, the Proposed Project would not have an adverse effect on a scenic vista. There would be **no impact**.

b. Damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway—No Impact

As stated above, there are no officially designated California Scenic Highways near the project site; however, two highways within approximately 1 mile of the project site are eligible for designation (Caltrans 2018). While elements of the Proposed Project such as the communication tower would likely be visible from these highways, distance, existing topography, existing development, existing vegetation, and the speed of travel would all reduce the impact of the Proposed Project. Furthermore, the site, while undeveloped, has been cleared and does not have any significant scenic resources existing on site. Therefore, the Proposed Project would have **no impact** on scenic resources within a state scenic highway.

c. Conflict with applicable zoning and other regulations governing scenic quality—Less than Significant

As previously described, the Proposed Project's the Operations Building would be no taller than 35 feet and may be visible from nearby highways; however, the project site would not be meaningfully visible from any scenic highways and is not located in the vicinity of features that are specifically designated as having scenic significance. Further, as discussed in more detail in Section 3.11, "Land Use and Planning," CAL FIRE is a state agency whose jurisdiction supersedes local land use planning and zoning regulation. Furthermore, the site is designated as "Airport" in both the zoning and land use regulations for the city of Hollister, which do not have specific requirements governing scenic quality; therefore, the Proposed Project is generally consistent with applicable regulations. Therefore, the impact related to scenic quality regulations would be ***less than significant***.

Construction of the Proposed Project would noticeably alter the visual character of the project site by the presence of construction vehicles and machines. This would be visible from public viewpoints both within and outside the site. However, construction vehicles would be removed once construction is complete and this impact would be temporary.

d. New sources of substantial light or glare—Less than Significant with mitigation

The Proposed Project consists of building a new development on an undeveloped parcel. Construction activities would typically take place between the hours of 7:00 a.m. and 6:00 p.m. during the daytime, with after-hours work being permitted at the discretion of the State of California. Therefore, minimal construction-related lighting would be required. Furthermore, it is expected that potential sources of glare from metal or glass construction equipment

components during daylight hours would be largely screened from view by topography and existing vegetation. During operation, vehicles, buildings, and other items on site would be new sources of light and glare. However, with the introduction of **Mitigation Measure AES-1 (Design Buildings to Prevent Light Pollution and Glare)** that lighting would be designed and installed to be consistent with City of Hollister lighting policies intended to promote quality lighting design and prevent light pollution, and that both lighting and glare comply with City of Hollister policies for the general development standards of the Airport Zone. Therefore, the impact of light and glare would be **less than significant with mitigation**.

Mitigation Measure AES-1: Design Buildings to Prevent Light Pollution and Glare

CAL FIRE shall require that all outdoor lighting be designed to prevent nighttime light pollution by being fully shielded and directed downward and shall require that outdoor lighting be consistent with the requirements of the City of Hollister Code of Ordinances Chapter 17.16.090. Further, CAL FIRE shall require that lighting and glare comply with the requirements of the City of Hollister Code of Ordinances Chapter 17.12.040.

3.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies related to agriculture or forestry resources are applicable to the Proposed Project.

State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program

The California Department of Conservation (CDOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982, as a non-regulatory program to provide a consistent and impartial analysis of agricultural land use and land use changes throughout California. FMMP

now maps agricultural and urban land use for nearly 98 percent of the state's privately held land. FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDOC 2024a):

Prime Farmland: Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

Farmland of Statewide Importance: Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

Unique Farmland: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. Land must have been cropped at some time during the 4 years prior to the mapping date.

Farmland of Local Importance: Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

Other FMMP categories include Grazing Land, Urban and Built-up Land, Other Land, and Water.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) is designed to preserve agricultural and open space land. It establishes a program of private landowner contracts that voluntarily restrict land to agricultural and open space uses. The program is a two-step process involving the establishment of an agricultural preserve by the local legislative body and then approval of a land conservation contract. In return, Williamson Act parcels receive a lower property tax rate consistent with their actual use instead of their market value. Lands under contract may also support uses that are "compatible with the agricultural, recreational, or open-space use of [the] land" subject to the contract (California Government Code Section 51201[e]).

Government Code Section 51290 states that "(a) it is the policy of the state to avoid, whenever practicable, the location of any federal, state, or local public improvements and any improvements of public utilities, and the acquisition of land therefor, in agricultural preserves," and "(b) it is further the policy of the state that whenever it is necessary to locate such an improvement within an agricultural preserve, the improvement shall, whenever practicable, be located upon land other than land under a contract pursuant to this chapter."

Timberland and Forestland Regulations

The following definitions of timberland, timber, and forestland are provided in the Pub. Res. Code and Government Code as provided in Appendix G of the CEQA Guidelines:

Timberland: defined as land, other than land owned by the federal government and land designated by the board as experimental forest land (privately owned land as well), which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees (Pub. Res. Code Section 4526).

Timber: defined as trees of any species maintained for eventual harvest for forest products purposes, whether planted or of natural growth, standing or down, on privately or publicly owned land, including Christmas trees, but does not mean nursery stock (Government Code Section 51104[g]).

Forestland: land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits (Pub. Res. Code Section 12220[g]).

No timberland or timberland zoned Timberland Production areas are located within or adjacent to the project site.

Local Laws, Regulations, and Policies

CAL FIRE is the lead agency for the Proposed Project, therefore local agriculture and forestry resource regulations do not apply to the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only. Local laws, regulations, and policies are found in Appendix A.

3.2.2 Environmental Setting

The Proposed Project is located within the limits of the Hollister Municipal Airport, in the city of Hollister, in San Benito County. The Proposed Project involves relocating the existing Hollister AAB facilities to a new location within the airport, approximately 550 feet west of the existing facilities. Existing facilities would remain in place, and new facilities would be constructed in an area that is currently undeveloped and considered non-native annual grassland. The grassland is frequently mowed and tilled as part of routine management activities at the airport. The project site is classified by the City of Hollister as having both a land use and zoning classification of “Airport” and has surrounding land uses and zoning classifications of “Airport Support,” and “Industrial,” and “Light Industrial” (City of Hollister 2020, County of San Benito 2024).

The majority of the project site is comprised of Farmland of Local Importance with a minor area in the northeast portion of the site designated as Urban and Built-up Land (CDOC 2024a).

3.2.3 Discussion of Checklist Responses

a. a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use—No Impact

According to CDOC, the project site does not occur on lands designated as Prime, Unique, or Farmland of Statewide Importance (CDOC 2024a). The project site is located on land mapped as Farmland of Local Importance; however, the area is already within the existing limits of the Hollister Municipal Airport and has land use and zoning designations of "Airport" by the City of Hollister (City of Hollister 2020, County of San Benito 2023). Project implementation would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use; therefore, there will be **no impact** to these resources.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract—No Impact

As stated above, the Proposed Project is located within the existing Hollister Municipal Airport and is zoned Airport. The Proposed Project is not located on enrolled or non-enrolled Williamson Act land (CDOC 2024b). Therefore, the Proposed Project would have **no impact** regarding conflict with existing zoning for agricultural use or a Williamson Act contract.

c. Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production—No Impact

According to Pub. Res. Code Section 12220(g) "forest land" is land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. According to Pub. Res. Code Section 4526, "timberland" is defined as non-federal land that is available for, and capable of, growing a commercial crop of trees of a species used to produce lumber and other forest products. Existing habitat types within the project site are limited to non-native annual grassland and developed, and do not include any forested habitat (Montrose Environmental [Montrose] 2024). Furthermore, the project's location within an area zoned Airport would prohibit planting commercial crops of trees. The Proposed Project would have **no impact** associated with existing zoning for, or cause rezoning of, forest land.

d. Result in the loss of forest land or conversion of forest land to non-forest use—No Impact

There are no forested lands on the proposed project site, therefore, the Proposed Project would not result in the loss of or conversion of forest land. There would be **no impact** to forest land.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use – No Impact

As stated above, the Proposed Project would not result in the conversion of forest land to non-forest land or agricultural land to non-agricultural land. Nor does the Proposed Project involve other changes to the existing environmental that could result in conversion of farmland or forest land to other uses. Therefore, the Proposed Project would have **no impact** on conversion of forest and agricultural lands.

3.3 AIR QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
When available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. 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?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Regulatory Setting

The following sections describe federal and state laws, regulations, and policies that are relevant to impacts that could result from Proposed Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal and State Laws, Regulations, and Policies

The Clean Air Act (CAA) is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, known as the National Ambient Air Quality Standards (NAAQS), for seven criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM10), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), ground-level ozone (O_3), and lead. Of these criteria, pollutants, particulate matter, and ground-level ozone pose the greatest threats to human health.

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that can be more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride. CARB has enacted numerous regulations regulating mobile sources, such as off-road construction equipment and on-road vehicles, that are more stringent than the federal regulations.

The North Coast Central Air Basin (NCCAB) is currently in non-attainment of the state PM10 standards. The NCCAB is in attainment or unclassified for all other pollutants. The CAA and the California Clean Air Act require areas that are designated nonattainment to reduce emissions until federal and state standards are met.

The USEPA and CARB regulate various stationary, area, and mobile sources of criteria air pollutants and toxic air pollutants. The USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), also known as hazardous air pollutants (HAPs), at the federal level. In addition, the USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles.

The National Highway Transportation Safety Administration (NHTSA) and the USEPA updated the Corporate Average Fuel Economy (CAFE) and greenhouse gas (GHG) emissions standards for passenger cars and light trucks. In March 2022, CAFE standards were finalized for model years 2024 through 2026. The final rule establishes standards that require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks. In June 2024, CAFE standards were finalized for model years 2027 through 2031. The final rule establishes standards that require an industry-wide fleet average of approximately 50.4 mpg for passenger cars and light trucks, and an industry-wide fleet average for heavy-duty pickup trucks and vans of approximately 2.851 gallons per 100 miles in model year 2035. Similarly, fuel economy standards have been issued for medium- and heavy-duty vehicles of model years 2014-2018, including large pickup trucks and vans, semi-trucks, and all types and sizes of work trucks and buses (NHTSA 2024).

CARB has several regulations that regulate off-road vehicles emissions and limits to fleets of equipment and vehicles as well as other mobile sources. This includes recent regulatory updates to the In-use Off-Road Diesel-Fueled Regulation, Small Off-Road Engine Regulation, Portable Equipment Registration Program, Advanced Clean Fleets Regulation, Advanced Clean Trucks Regulation, and Advanced Clean Cars II Regulation. The latest revisions to the regulations for construction equipment require starting in 2024 the use of renewable diesel and verification by the lead agency that equipment used for their projects are in compliance with the applicable fleet regulations.

CARB regulates TACs by requiring implementation of various airborne toxic control measures (ATCMs), which are intended to reduce emissions associated with toxic substances. The following ATCMS may be relevant to the Proposed Project.

- ATCM to Limit Diesel-fueled Commercial Motor Vehicle Idling
- ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater
- ATCM for Stationary Compression Ignition Engines
- ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines – Standards for nonvehicular Diesel Fuel.
- Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations
- Asbestos ATCM for Surfacing Applications

The Proposed Project is in San Benito County, which is within the NCCAB. The Monterey Air Resources District (MBARD) manages air quality in the basin for attainment and permitting purposes. The most recent air quality plan for the region is the 2012–2015 Air Quality Management Plan (2016 AQMP). The 2016 AQMP documents MBARD's progress toward attaining the state ozone standard (which was achieved in 2020). The 2007 Federal Maintenance Plan Monterey Bay Region presents the strategy for maintaining the NAAQS for ozone in the NCCAB. This plan outlines how the MBARD is going to ensure continued attainment of the 8-hour ozone standard in the NCCAB. The 2005 Particulate Matter Plan contains the district's plan for implementing Senate Bill 656 and achieving attainment of the state's PM10 standards. MBARD (formerly the Monterey Bay Unified Air Pollution Control District [MBUAPCD]), established thresholds of significance for project emissions of criteria air pollutants in their 2008 CEQA Air Quality Guidelines (MBUAPCD 2008). These thresholds establish emission levels that serve as a surrogate for ambient air concentrations and in general these levels of emissions are unlikely to cause or contribute to an ambient air quality violation. For construction impacts, the threshold is 82 pounds per day of direct emissions of PM10. For operational impacts, the threshold is 137 pounds per day of for emissions of volatile organic compounds and also 137 pounds per day of emission of NOx. The threshold for operational PM10 is 82 pounds per day of emissions on on-site and unpaved roads. The operational thresholds are 150 pounds per day of SO_2 and 550 pounds per day of CO or, alternatively, are based on roadway intersections and roadway segments degrading to level of service E or F.

3.3.2 Environmental Setting

The Project site is located at the Hollister Municipal Airport in the City of Hollister in San Benito County. Hollister, at the northern end of the San Benito Valley, experiences west winds nearly one-third of the time. The prevailing air flow during the summer months probably originates in the Monterey Bay area and enters the northern end of the San Benito Valley through the air gap through the Gabilan Range occupied by the Pajaro River. In addition, a northwesterly air flow frequently transports pollutants into the San Benito Valley from the Santa Clara Valley. The maximum temperatures (in degrees Fahrenheit [°F]) range from the high 50s to the mid-80s, while the minimum temperatures are from the mid-30s to the high 50s. The mean annual precipitation is 14.19 inches, and the winds are typically mild.

Coarse particle pollution, or PM10, is the major regional air pollutant of concern in the NCCAB. In San Benito County, PM10 exceeds the standard approximately 4 to 5 days per year.

The area surrounding Hollister Municipal Airport is mostly covered by concrete and asphalt. South of the Proposed Project site are some industrial areas. The distance from the closest project location to the nearest worker receptors on Airport Drive and Aerostar Way would be 350 feet. The nearest residential receptors would be people residing at San Benito County Jail and Juvenile Hall, located over 1,000 feet from the Proposed Project site. The nearest schools are located over 2 miles away, and the nearest churches are located about a half mile away.

CAL FIRE currently has an existing facility at the Hollister Municipal Airport. The operations from this existing facility would be relocated to the location of the Proposed Project site. Thus, the existing baseline includes the CAL FIRE activities that occur at the existing facility, including aircraft activity, vehicles, and fire-retardant mixing. As such, these emissions would only be considered a new environmental impact if the Proposed Project would result in an increase in the amount of activity compared to the baseline of the existing facility. Building-associated

emissions that may combust fossil fuels, such as space heating, would be additional as the existing buildings would not be demolished but repurposed by the City of Hollister and the airport; therefore, the existing emissions would continue and new emissions would be introduced.

Air Pollutants

Several air pollutants of concern would be associated with Proposed Project activities. These air pollutants are discussed briefly below. Two main categories of air pollutants are described: criteria air pollutants and TACs. Criteria air pollutants are air pollutants with national and/or state air quality standards that define allowable ambient (or background) concentrations of these substances in the air. TACs are air pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations.

Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless gas that is highly toxic. CO is formed by the incomplete combustion of fuels and is emitted directly into the air. Ambient CO concentrations normally are considered a localized effect and typically correspond closely to the spatial and temporal distribution of vehicular traffic. CO concentrations are also influenced by wind speed and atmospheric mixing. Under inversion conditions (when a low layer of warm air, along with its pollutants, is held in place by a higher layer of cool air), CO concentrations may be distributed more uniformly over an area to some distance from vehicular sources. CO binds with hemoglobin, the oxygen-carrying protein in blood, and thereby reduces the blood's capacity to carry oxygen to the heart, brain, and other parts of the body. At high concentrations, CO can cause heart difficulties in people with chronic diseases, impair mental abilities, and cause death.

Ozone

Ozone (O_3) is a reactive gas that, in the troposphere (the lowest region of the atmosphere), is a product of the photochemical process involving the sun's energy. It is a secondary pollutant that is formed when nitrogen oxides and reactive organic gases (both described below) react in the presence of sunlight. Ozone at the Earth's surface causes numerous adverse health effects and is a criteria pollutant. It is a major component of smog. In the stratosphere, ozone exists naturally and shields the Earth from harmful incoming ultraviolet radiation. High concentrations of ground-level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments. Ozone also damages natural ecosystems such as forests and foothill natural communities, agricultural crops, and some human-made materials (e.g., rubber, paint, and plastics).

Nitrogen Oxides

Nitrogen oxides (NOx) are a family of gaseous nitrogen compounds that are precursors to the formation of ozone and particulate matter (described below). The major component of NOx, nitrogen dioxide (NO_2), is a reddish-brown gas that is toxic at high concentrations. NOx results primarily from the combustion of fossil fuels under high temperature and pressure. On-road and off-road motor vehicles and fuel combustion (use of natural gas for heating, cooking, and industrial use) are the major sources of this air pollutant.

Reactive Organic Gases

Reactive organic gases (ROG) consist of hydrocarbon compounds that exist in the ambient air. ROG contributes to the formation of smog and/or may itself be toxic. ROG emissions are a primary precursor to the formation of ozone. Sources of ROG include consumer products, paints, some trees, and the combustion of fossil fuels.

Particulate Matter

Particulate matter (PM) is a complex mixture of extremely small particles and liquid droplets. PM is made up of various components, including acids, organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to the potential for causing health problems. PM particles that are smaller than 10 micrometers in diameter, called PM10, are of most concern because these particles pass through the throat and nose and are deposited in the thoracic region of the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. PM10 particles are typically found near roadways and industrial operations that generate dust. Fine particles less than 2.5 micrometers in diameter, called PM2.5, are found in smoke and haze. PM2.5 particles penetrate deeply into the thoracic and alveolar regions of the lungs.

Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless, irritating gas with a “rotten egg” smell formed primarily by the combustion of sulfur-containing fossil fuels. Suspended SO_2 particles contribute to poor visibility in many areas, including the NCCAB and are a component of PM10.

Lead

Lead is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. There is no known safe exposure level to lead. The health effects of lead poisoning include loss of appetite, weakness, apathy, and miscarriage. Lead poisoning can also cause lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract and can reduce mental capacity.

Gasoline-powered automobile engines were a major source of airborne lead due to the use of leaded fuels. The use of leaded fuel has been mostly phased out since 1996, which has resulted in dramatic reductions in ambient concentrations of lead. Because lead persists in the environment forever, however, areas near busy highways continue to have high levels of lead in dust and soil.

Hydrogen Sulfide

Hydrogen sulfide (H_2S) is associated with geothermal activity, oil and gas production and refining, sewage treatment plant operations, and confined animal feeding operations. H_2S is extremely hazardous in high concentrations and can cause death.

Sulfates

Sulfates are the fully oxidized, ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds result primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This

sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

CARB's sulfate standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels that exceed the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardiopulmonary disease. Sulfates are particularly effective in degrading visibility and, because they are usually acidic, can harm ecosystems and damage materials and property.

Vinyl Chloride

Vinyl chloride is a colorless gas that does not occur naturally. It is formed when other substances, such as trichloroethane, trichloroethylene, and tetrachloroethylene, are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC) for a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

Toxic Air Contaminants

Hundreds of different types of TACs exist, with varying degrees of toxicity. Many TACs are confirmed or suspected carcinogens or are known or suspected to cause birth defects or neurological damage. For some chemicals, such as carcinogens, no thresholds exist below which exposure can be considered risk free. TAC sources in the Proposed Project area include fossil fuel combustion sources, such as aircraft, vehicle engines, space heating and refueling equipment.

Sources of TACs are categorized as stationary sources, area-wide sources, and mobile sources. The USEPA maintains a list of 187 TACs, also known as hazardous air pollutants. These hazardous air pollutants are also included on CARB's list of TACs. California considers diesel particulate matter (DPM) to be a primary contributor to health risk from TACs because particles in diesel exhaust carry a mixture of many harmful organic compounds and metals, rather than being a single substance as are other TACs.

Valley Fever

Coccidioidomycosis, often referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top few inches of soil, and the existence of the fungus in most soil areas is temporary. The cocci fungus lives as a saprophyte (an organism, especially a fungus or bacterium, that grows on and derives its nourishment from dead or decaying organic matter) in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-disturbing activities and become airborne. Agricultural workers, construction workers, and other people who are outdoors and are exposed to wind, dust, and disturbed topsoil are at an elevated risk of contracting Valley Fever (California Department of Public Health [CDPH] 2021).

Most people exposed to the CI spores will not develop the disease. Of 100 people who are infected with Valley Fever, approximately 40 will exhibit some symptoms and two to four will have the more serious disseminated forms of the disease. After recovery, nearly all, including the asymptomatic, develop a life-long immunity to the disease. African Americans, Filipino, women in the third trimester of pregnancy, people with diabetes, and persons whose immunity is compromised are most likely to develop the most severe form of the disease (U.S. Centers for Disease Control and Prevention 2020). In addition to humans, 70 animal species are known to be susceptible to Valley Fever infections, including dogs, cats, and horses, with dogs being the most susceptible (Los Angeles County Public Health 2007).

The Proposed Project is located in an area designated as "suspected endemic" for Valley Fever. In 2022, 113 new cases were reported in Monterey County, for a case rate of 26 cases per 100,000 people. Annual case reports for 2016 through 2022 from the CDPH indicate that Monterey County has reported incident rates for Valley Fever that range from 18.1 to 54.1 cases per year per 100,000 population (CDPH 2023). In 2024, Monterey County had 159 cases by the end of August (CDPH 2024). These incidence rates are among the higher rates in the state during this time period. Fire Retardant

CAL FIRE uses fire retardant as part of its fire-fighting efforts and would store fire retardant at the Proposed Project site. The chemical composition of the fire retardant used by CAL FIRE is 88 percent water and 12 percent ammonium phosphate. Ammonium phosphate is commonly found in fertilizers and acts as a fire-retardant component. Other chemicals in the fire retardant consist of gum thickeners to help it stick to vegetation and red coloring so it is visible to pilots from the sky. From an air quality perspective, ammonium phosphate is not considered a TAC.

Odors

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, anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, headache). The ability to detect odors is subjective and varies considerably among the population. In other words, people may have different reactions to the same odor. An odor that is offensive to one person may be acceptable to another (e.g., roasting coffee). An unfamiliar odor is more easily detected and more likely to cause complaints than a familiar one. This is known as odor fatigue; a person can become desensitized to almost any odor, after which recognition occurs only with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, a person may describe the quality of an odor as "flowery" or "sweet." Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the concentration in the air. When an odor sample is progressively diluted, the odor concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odor reaches a level that is no longer detectable.

3.3.3 Discussion of Checklist Responses

a. Conflict with or obstruct implementation of the applicable air quality plan—Less than Significant

A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds growth estimates included in the applicable air quality plan, which, in turn, would generate emissions not accounted for in the applicable air quality plan's emissions budget. Therefore, projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rates included in the relevant air quality plans. According to the MBARD's *CEQA Air Quality Guidelines* (MBUAPCD 2008), if a project is above any of the district's significance thresholds, it is in conflict with its air quality plans. As discussed in items 3.3(b) and 3.3(c) below, the Proposed Project would not exceed these significance thresholds and, therefore, does not conflict with or obstruct implementation of the 2005 Particulate Matter Plan or its 2007 federal maintenance plan for ozone. The Proposed Project would comply with MBARD permitting rules and regulations for its flame retardant mixing facility and emergency generator. The refueling station would also go through air permitting once additional details regarding anticipated annual throughput of emissions is known. The construction contractor would comply with CARB's updated fleet rules requiring the use of renewable diesel for off-road vehicle use, as well as the ATCMs that are outlined above. Thus, the Proposed Project would not obstruct or conflict with the implementation of any applicable air quality plan and would not create long-term growth that could affect the existing emissions budget. Therefore, the Proposed Project would have a **less-than-significant impact** with respect to conflicts with existing air quality plans.

b. Cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area—Less than Significant

Construction activities of the Proposed Project would result in emissions of criteria air pollutants as exhaust from operating construction equipment, sediment and material hauling, and worker trips. Operation of the Proposed Project would result in emissions of criteria air pollutants as exhaust from operation vehicles, airplanes, and helicopters, as well as testing of emergency generators and pumps, mixing of flame retardant, and refueling of equipment. To evaluate the net increase of criteria pollutants from the Proposed Project, emission estimates were calculated using the California Emission Estimator Model (CalEEMod), version 2022.1.1.26, as well as the following information provided in Chapter 2, *Project Description*:

- The Proposed Project would have an emergency generator that was assumed to operate for 20 hours per year.
- There would be fire pumps and another water pump with horsepower as specified in the CalEEMod results.
- The flame retardant mixing emissions would be controlled with a dust collector meeting MBARD requirements, assumed to be 0.01 grains per dry standard cubic foot of air and a maximum air flow rate of 1,500 cubic feet per minute.
- Helicopter emissions would increase based on an increase in activity from 140 days to 200 days of training and an increase in operating hours to7 hours a day with a limit of 5 hours at night, compared to only 7 hours a day currently.

Modeling was completed using conservative assumptions for equipment, scheduling, and haul routes and compares the calculated average daily emissions for the Proposed Project to the threshold limits set by MBARD. For the purpose of this analysis, the modeling input assumes that phases would occur sequentially to provide a conservative emissions estimate. The funded and future unfunded components of the Proposed Project were assumed to occur in separate construction phases.

The refueling would release additional ROG emissions. However, emissions from the refueling station are not quantified at this time as the annual throughput of fuel have not yet been specified. The refueling station would also go through air permitting once additional details regarding anticipated annual throughput of emissions is known. Permitting requirements would include implementation of best available control technology for these emissions; thus, the refueling station is unlikely to cause a significant increase in emissions.

The associated modeling calculations are detailed in **Appendix B, *Air Quality and Greenhouse Gas Calculations*.** Modeled emissions are shown in **Table 3.3-1.**

Table 3.3-1. Estimated Criteria Pollutant Emissions for the Proposed Project

	Pollutant						
	ROG	**NO_X**	**CO**	**PM10 Exhaust**	**PM10 Fugitive**	**PM2.5 Exhaust**	**PM2.5 Fugitive**
Construction Emissions (lb/day)							
Phase I Funded Construction Maximum Daily Emissions	99.9	29.0	32.2	1.17	51.3	1.08	7.41
Phase II Unfunded Construction Maximum Daily Emissions	96.4	7.99	9.81	0.35	46.3	0.32	5.42
MBARD Daily Emissions Threshold (lb/day)	None	None	None	82		None	None
Exceed Threshold?	No	No	No	No	No	No	No
Incremental Increase in Operation Emissions (lb/day)							
Incremental Operation Total Daily Emissions	19.39	88.02	25.07	5.68	23.15	5.67	23.15
MBARD Daily Emissions Threshold (lb/day)	137	137	550	82		None	None
Exceed Threshold?	No	No	No	No	No	No	No

Source: Appendix B.

Notes: CO = carbon monoxide; lb/day = pounds per day; NO_X = nitrogen oxides; ROG = reactive organic gases.
SO_2 threshold is not shown but is 150 lb/day. SO_2 emissions are anticipated to be substantially less than the threshold.

As shown in Table 3.3-1, the estimated daily emissions for the Proposed Project associated with construction activities are less than the MBARD threshold for all evaluated criteria pollutants. Criteria pollutants PM2.5 and PM10 from fugitive dust would be minimized further by the

implementation of **BMP-7 (Dust Management Controls and Air Quality Protection)**. The incremental increase in operational emissions would be below MBARD's threshold of significance. Since the modeled emissions from the Proposed Project do not exceed the MBARD air quality emission thresholds, the Proposed Project's emissions would not be cumulatively considerable. As a result, according to the modeling results, criteria pollutant emissions from the Proposed Project would have a ***less-than-significant impact***.

BMP-7: Dust Management Controls and Air Quality Protection

The contractor will implement the following applicable Construction Mitigation Measures to reduce emissions of fugitive dust and equipment exhaust:

- All haul trucks transporting soil, sand, or other loose material offsite will be covered.
- All vehicle speeds on unpaved roads will be limited to 15 miles per hour.
- Idling times will be minimized either by turning equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure [13 California Code of Regulations Section 2485]).
- All construction equipment will be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation.

c. Expose sensitive receptors to substantial pollutant concentrations—Less than Significant with Mitigation

Construction activities from the Proposed Project could generate TACs. Specifically, the use of off-road equipment could produce DPM as a result of exhaust emissions. Chronic, long-term exposure to DPM can result in chronic health effects and cancer. Operation of the Proposed Project would involve diesel-fueled vehicles, as well as jet fuel and aviation gasoline to fuel the airplanes and helicopter. The Proposed Project's second phase of buildout, pending funding, includes a refueling station for the vehicles. The refueling station would emit volatile organic compounds, many of which are considered TACs, during refueling activities. When combusted, jet fuel and aviation gasoline emit TACs in the exhaust that may cause short-term, acute health effects; chronic health effects and cancer may result from chronic, long-term exposure to these fossil fuel exhaust TACs.

The generation of TAC emissions in most cases would be temporary, especially considering the variable nature of construction and operation activities and the short amount of time such equipment is typically operating within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Chronic and cancer-related health effects estimated over short periods are uncertain. Cancer potency factors are based on animal lifetime studies or worker studies with long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from exposure that would last only a small fraction of a lifetime. Some studies indicate that the dose rate may change the potency of a given dose of a carcinogenic chemical. In other words, a dose delivered over a short period may have a different potency than the same dose delivered over a lifetime (California Office of Environmental Health Hazard Assessment [OEHHA] 2015). Furthermore, construction and

operation impacts are most severe directly adjacent to a project site and decrease rapidly with increasing distance. Concentrations of mobile-source DPM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB 2005).

The nearest off-site sensitive receptors – the individuals most likely to be subjected to adverse health effects from TACs – are located along Airport Road and Aerostar Way at the CVH and at the San Benito County Jail and Juvenile Hall. The only sensitive receptors in the area of the Proposed Project's construction or operation activities are the onsite CAL FIRE employees and the adjacent Hollister Fire Station 3. The amount of time these employees are living at these sleeping facilities is unknown; thus, their level of exposure is unknown. The exposure to TACs from construction and operation would be considered less than significant due to the distance of sensitive receptors to the Proposed Project sources of TACs.

The potential for Valley Fever cases associated with Proposed Project construction is high given that Monterey County has some of the highest incidence rates in the state. The California Occupational Safety and Health Administration (Cal/OSHA) has established regulations that address worker health and safety issues related to Valley Fever. Since Valley Fever is endemic to the area, nearby sensitive receptors may already have developed immunity. Given the fact that the Proposed Project would involve dust-causing activities, the potential for construction activities to encounter and disperse CI spores and create the potential for additional Valley Fever infections is high. Mitigation measures that reduce fugitive dust would also reduce the chances of dispersing CI spores.

Mitigation Measure AQ-1 (Prepare and Implement a Valley Fever Management Plan in Consultation with CDPH and Monterey County Department of Public Health) requires that, prior to the start of construction, the CAL FIRE or its contractors must draft a Valley Fever Management Plan (VFMP), consult with CDPH and the Monterey County Department of Public Health regarding Valley Fever best management practices, and implement all such feasible measures recommended by these agencies.

Because all generated pollutants would occur temporarily and are not considered a significant risk to sensitive receptors, it is not likely that there would be substantial effects as a result of emissions generated by the Proposed Project. However, coccidioidomycosis spores could expose sensitive receptors to substantial pollutant concentrations, which would be reduced to a less-than-significant level after implementation of mitigation measures. Therefore, this impact would be ***less than significant with mitigation***.

> **Mitigation Measure AQ-1: Prepare and Implement a Valley Fever Management Plan in Consultation with CDPH and Monterey County Department of Public Health.**
>
> CAL FIRE or its contractor(s) shall prepare and implement a Valley Fever Management Plan (VFMP). The VFMP will be developed in consultation with CDPH and the Monterey County Department of Public Health prior to the start of construction. The VFMP shall include, but not be limited to, the following elements as currently suggested by CDPH:
>
> Adopt site plans and work practices that reduce workers' exposure, and which would also help minimize primary and secondary exposure to the community through direct dispersal of spores or secondary dispersal from contaminated workers or equipment

bringing spores to the community. The site plans and work practices may include the following:

- Minimize the area of soil disturbed.
- Use water, appropriate soil stabilizers, and/or re-vegetation to reduce airborne dust.
- Stabilize all spoils piles by tarping or other methods.
- Suspend work during heavy winds (i.e. winds greater than 25 miles per hour). The contractor/foreman would be responsible for suspending work during high winds, and it will be treated the same as a rainy-day delay.
- Take measures to reduce transporting spores offsite, such as:
  - Clean tools, equipment, and vehicles before transporting offsite.
  - If workers' clothing is likely to be heavily contaminated with dust, provide coveralls and change rooms, and showers where possible.
- Train workers and supervisors about the risk of Valley Fever, the work activities that may increase the risk, and the measures used onsite to reduce exposure. Also train on how to recognize Valley Fever symptoms. This helps to ensure proper diagnosis and treatment as well as tracking potential outbreaks that may affect the community.
- Encourage workers to report Valley Fever symptoms promptly to a supervisor. Not associating these symptoms with workplace exposures can lead to a delay in appropriate diagnosis and treatment. This helps to ensure proper diagnosis and treatment as well as tracking potential outbreaks that may affect the community.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people—Less than Significant

Diesel exhaust from construction activities may generate temporary odors while construction of the Proposed Project is underway. Excavated and recently exposed vegetation, soil, or sediment may contain decaying organic material that may create objectionable odors. Odors created by exposure of organic material are expected to be minimal because of the nature of the alluvial soils in the project area. Once construction activities have been completed, these odors would cease. Operational activities would also generate temporary odors, but the odors would be short-lived and would include diesel, jet fuel, and aviation gasoline from vehicles, aircraft, and helicopters used at the Proposed Project site. In addition, there may be fumes related to training activities at the Proposed Project site from flame retardant and controlled fires used during training and testing activities.

The intensity of the odor perceived by a receptor depends on the distance of the receptor from the excavation area and the amount and quality of the exposed soil or sediment material. The Proposed Project is not listed as a known source of odor with recommended distances from sensitive odor receptors. Following the completion of construction activities, exposed sediment and soil in the project area would be revegetated or paved. Impacts related to potential generation of objectionable odors, if any, are thus expected to be temporary and ***less than significant***.

3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state HCP?	☐	☐	☐	☒

3.4.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Clean Water Act

Areas meeting the regulatory definition of "waters of the United States" (jurisdictional waters) are subject to the jurisdiction of U.S. Army Corps of Engineers (USACE) under provisions of

Section 404 of the 1972 Clean Water Act (Federal Water Pollution Control Act) (CWA) and Section 10 of the 1899 Rivers and Harbors Act (described below). These waters may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, all interstate waters, all other waters (e.g., intrastate lakes, rivers, streams, mudflats, sandflats, playa lakes, and natural ponds), all impoundments of waters otherwise defined as "waters of the United States," tributaries of waters otherwise defined as "waters of the United States," the territorial seas, and wetlands (termed Special Aquatic Sites) adjacent to "waters of the United States" (33 Code of Federal Regulations [CFR], Part 328, Section 328.3). Wetlands on non-agricultural lands are identified using the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987).

Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial water bodies such as swimming pools, and water-filled depressions (33 CFR, Part 328).

Construction activities within jurisdictional waters are regulated by USACE. The placement of fill into such waters must comply with the CWA permit requirements of USACE. Under CWA Section 401, no USACE permit would be effective in the absence of a state water quality certification. The State Water Resources Control Board (SWRCB), together with the state's nine Regional Water Quality Control Boards (RWQCBs), are charged with implementing water quality certification in California.

Any placement of dredged or fill material within areas defined as waters of the United States (i.e., wetlands and other waters) would require a Section 404 fill discharge permit from the USACE and a Section 401 Water Quality Certification from the Central Coast RWQCB.

There are no potentially jurisdictional waters of the United States in the project area.

Federal Endangered Species Act

The federal Endangered Species Act (FESA) protects listed wildlife species from harm or "take," which is broadly defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Take can also include habitat modification or degradation that directly results in death or injury of a listed animal species. An activity can be defined as take even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under the FESA only if they occur on federal lands or if the project requires a federal action, such as a CWA Section 404 fill permit from USACE. If take of a federally listed animal species would occur, incidental take approval would be required through either Section 7 or Section 10 consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS), as applicable.

Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA; 16 U.S. Code [USC] Section 703, Supp. I, 1989) prohibits the killing, capture, possession, or trading of any migratory bird, migratory bird part, or their nests or eggs, except in accordance with regulations prescribed by the Secretary of the Interior. The trustee agency that addresses issues related to the MBTA is USFWS. Migratory birds protected under this law include those species that are native to the U.S. and its

territories. The MBTA protects active nests from destruction. An active nest under the MBTA, as described by the U.S. Department of the Interior in its April 16, 2003, Migratory Bird Permit Memorandum, is one having eggs or young. Nest starts, prior to egg laying, are not protected from destruction.

All native bird species occurring in the project area are protected by the MBTA.

Federal Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC Section 668 *et seq*.) makes it unlawful to import, export, take, possess, sell, purchase, barter, or transport any bald eagle or golden eagle, or their parts, products, nests, or eggs. Take includes pursuing, shooting, poisoning, wounding, killing, capturing, trapping, collecting, molesting, or disturbance. Regulations further define "disturb" as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior." The trustee agency that addresses issues related to the MBTA is USFWS. Exceptions may be granted by USFWS for scientific or exhibition use, or for traditional and cultural use by Native Americans. Additionally, the USFWS may issue eagle disturbance take permits under certain circumstances for activities that may result in the take of eagles by disturbance.

State Laws, Regulations, and Policies

Porter-Cologne Water Quality Control Act

The SWRCB works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect waters of the state. Their authority comes from the CWA and the State’s Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The Porter-Cologne Act broadly defines waters of the state as “any surface water or groundwater, including saline waters, within the boundaries of the state.” Because the Porter-Cologne Act applies to any water, whereas the CWA applies only to certain waters, California’s jurisdictional reach overlaps and may exceed the boundaries of waters of the United States (U.S.). For example, Water Quality Order No. 2004-0004-DWQ states that *shallow w*aters of the state include headwaters, wetlands, and riparian areas. Where riparian habitat is not present, such as may be the case at headwaters, jurisdiction is taken to the top of bank.

On April 2, 2019, the SWRCB adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. In these new guidelines, riparian habitats are not specifically described as waters of the state but instead as important buffer habitats to streams that do conform to the State Wetland Definition. The Procedures describe riparian habitat buffers as important resources that may both be included in required mitigation packages for permits for impacts to waters of the state, as well as areas requiring permit authorization from the RWQCBs to impact.

Pursuant to the CWA, and as described above, projects that are regulated by the USACE must obtain a Section 401 water quality certificate (WQC) permit from the RWQCB. This WQC ensures that the Proposed Project will uphold state water quality standards. Because California’s

jurisdiction to regulate its water resources is much broader than that of the federal government, proposed impacts on waters of the state require WQC even if the area occurs outside of USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements even if the USACE does not, for example for riparian habitats which are buffers to waters of the state. Under the Porter-Cologne Act, the SWRCB and the nine RWQCBs also have the responsibility of granting CWA National Pollutant Discharge Elimination System (NPDES) permits and waste discharge requirements (WDRs) for certain point-source and non-point discharges to waters.

Any activities within the project area that affect waters of the United States or waters of the state would require a Section 401 WQC and/or WDRs from the RWQCB. Waters within a project area are considered both waters of the United States and waters of the state.

There are no potentially jurisdictional waters of the U.S. or waters of the state within the area of the Proposed Project .

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code [F&G Code], Chapter 1.5, Sections 2050-2116) prohibits the take of any plant or animal species designated by the California Fish and Game Commission as threatened, endangered, or a candidate for listing as threatened or endangered. In accordance with the CESA, California Department of Fish and Wildlife (CDFW) has jurisdiction over state-listed species. CDFW regulates activities that may result in "take" of individuals listed under the Act (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of "take" under the F&G Code. CDFW has interpreted "take" to include the "killing of a member of a species which is the proximate result of habitat modification." If project activities would result in take of a state listed or candidate species, an incidental take permit would be required through Section 2081 consultation with the CDFW.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) (F&G Code Section 1900 et seq.) allows the Fish and Game Commission to designate plants as rare or endangered. The official list of designated rare or endangered plants is contained in the California Code of Regulations, Title 14, Section 670.2. The NPPA prohibits take of endangered or rare native plants, with some exceptions for agricultural and nursery operations, emergencies, or after properly notifying CDFW for vegetation removal from canals, roads, utility right-of-way, or other specified situation under Section 1913.

California Environmental Quality Act

CEQA and CEQA Guidelines provide guidance in evaluating impacts of projects to biological resources and determining which impacts would be significant. CEQA defines "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." Under CEQA Guidelines Section 15065, a project's effects on biotic resources are deemed significant where the project would:

- substantially reduce the habitat of a fish or wildlife species;
- cause a fish or wildlife population to drop below self-sustaining levels;
- threaten to eliminate a plant or animal community; or

- reduce the number or restrict the range of a rare or endangered plant or animal.

In addition to the Section 15065 criteria that trigger mandatory findings of significance, Appendix G of CEQA Guidelines provides a checklist of other potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G may or may not be significant, depending on the level of the impact.

Section 15380(b) of CEQA Guidelines provides that a species not listed on the federal or state lists of protected species may be considered rare if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in the FESA and the CESA and the section of the F&G Code dealing with rare or endangered plants or animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either USFWS or CDFW or species that are locally or regionally rare.

CDFW maintains lists of vertebrate species designated as "species of special concern." Species of special concern is an administrative term with no formal legal status but serves to focus attention on animals determined to be at conservation risk. Species of special concern fall under the category of potentially rare or sensitive species and are considered for environmental review in accordance with CEQA Guidelines Section 15380(b).

CDFW works cooperatively with the California Native Plant Society (CNPS), a non-governmental conservation organization, to review and rank rare plant species in California through the California Rare Plant Rank (CRPR) system. Through the CRPR system, plants are assigned rarity ranks as follows:

- CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
- CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
- CRPR 2A: Plants presumed extirpated in California but common elsewhere
- CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
- CRPR 3: Plants about which more information is needed – review list
- CRPR 4: Plants of limited distribution – watch list

The CRPR listings are further described by the following threat ranks:

- 0.1—Seriously endangered in California (over 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)
- 0.3—Not very endangered in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Plants with a CRPR rank of 1 or 2 are generally considered to meet the CEQA Guidelines Section 15380 criteria, although plant with a CRPR rank of 3 or 4 may also meet criteria in if they are considered locally rare.

California Fish and Game Code

The F&G Code includes regulations governing the use of, or impacts on, many of the state's fish, wildlife, and sensitive habitats. CDFW exerts jurisdiction over the bed and banks of rivers, lakes, and streams according to provisions of Sections 1601–1603 of the F&G Code. The F&G Code requires a Streambed Alteration Agreement for the fill or removal of material within the bed and banks of a watercourse or water body and for the removal of riparian vegetation.

Certain sections of the F&G Code describe regulations pertaining to certain animal species. For example, F&G Code Sections 3503, 3513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFW. Raptors (i.e., eagles, falcons, hawks, and owls) and their nests are specifically protected in California under F&G Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Non-game mammals are protected by F&G Code Section 4150, and other sections of the code protect other taxa.

All native bird species that occur in the project area are protected by the F&G Code. Projects may be required to take measures to avoid impacts on nesting birds under California F&G Code Sections 3503, 3513, and 3800.

Local Laws, Regulations, and Policies

CAL FIRE is the lead agency for the Proposed Project, therefore local regulations do not apply to the Proposed Project. Accordingly, the following discussion of local laws is provided for informational purposes only. Local laws, regulations, and policies are found in Appendix A.

3.4.2 Environmental Setting

The Proposed Project is located within the limits of the Hollister Municipal Airport, in the city of Hollister, in San Benito County. The Proposed Project will involve relocating the existing Hollister AAB facilities to a new location within the airport, approximately 550 feet west of the existing facilities. Existing facilities would remain in place, and new facilities would be constructed in an area that is currently undeveloped and considered non-native annual grassland (Montrose 2024). As part of routine management activities at the airport, the annual grassland is frequently mowed and tilled. Ground squirrel control also occurs. There are no wetlands or waterways present on or immediately next to the project site.

Special-Status Species

A biological resources report was completed for the Proposed Project and is included as **Appendix C**. Report findings for special-status species were based on queries of the USFWS Information for Planning and Conservation (IPaC), California Natural Diversity Database (CNDDB), and CNPS Inventory of Rare and Endangered Plants for the project area as well as habitat determinations and results of a field survey on July 30, 2024 (Montrose 2024).

The biological resources report assessed potential for special-status species to occur on the project site, including species listed as threatened or endangered under the federal ESA,

candidates for possible future listing under the ESA, species listed or proposed for listing under CESA, plants listed as rare under the California NPPA, plants with CRPR 1 or 2 designation, and CDFW-designated species of special concern are fully protected.

Figure 3.4-1 shows CNDDB occurrences records of special-status plant species within 5 miles of the project site. **Figure 3.4-2** shows CNDDB occurrences of special-status wildlife species within 5 miles of the project site. The potential for special-status species to occur in areas affected by the Proposed Project was evaluated according to the following criteria:

- **None:** indicates that the area contains a complete lack of suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.
- **Not Expected:** indicates situations where suitable habitat or key habitat elements may be present but may be of poor quality or isolated from the nearest extant occurrences. Habitat suitability refers to factors such as elevation, soil chemistry and type, vegetation communities, microhabitats, and degraded/substantially altered habitats.
- **Possible:** indicates the presence of suitable habitat or key habitat elements that potentially support the species.
- **Present:** indicates that the target species was observed directly or its presence was confirmed by diagnostic signs during field investigations or previous studies in the area.

Database queries discussed above generated a list of 28 special-status plant species and 25 special-status wildlife species as known or having the potential to occur within the general region of the Proposed Project (Montrose 2024). Each of these species were assessed to determine the potential to occur on the project site. Based on the review, no special-status plant species have potential to occur on project site; however, seven special-status wildlife species, while not expected to occur, could not be entirely ruled out as having the potential to occur on the project site (Montrose 2024). These species are further discussed below.

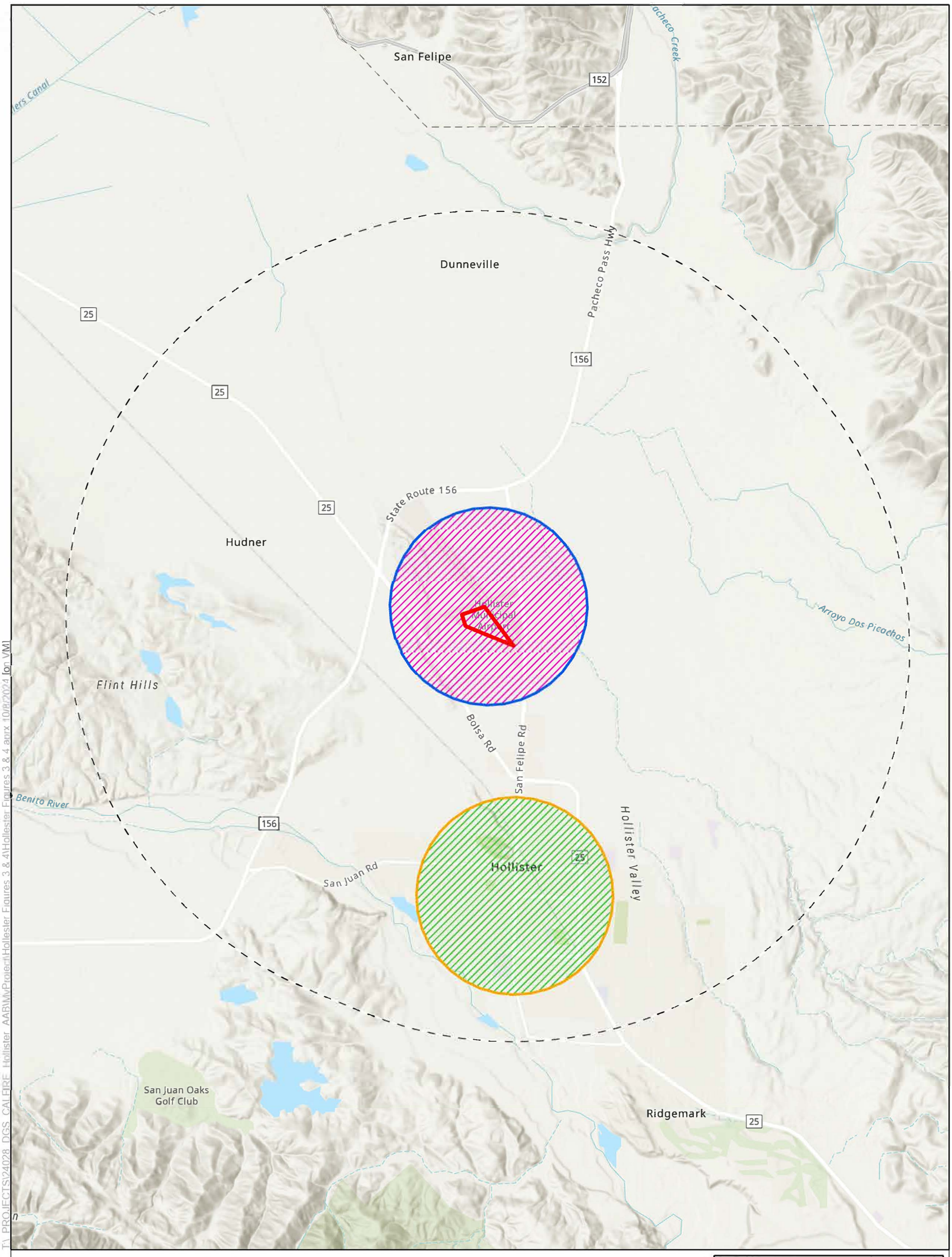

Figure 3.4-1
CNDDB Occurrence Records for Special-status Plant Species within 5 Mile Radius of Project Area

CAL FIRE Hollister Air Attack Base Relocate Facilities Project

MONTROSE ENVIRONMENTAL

Data Source: CNDDB October 2024, CDFW

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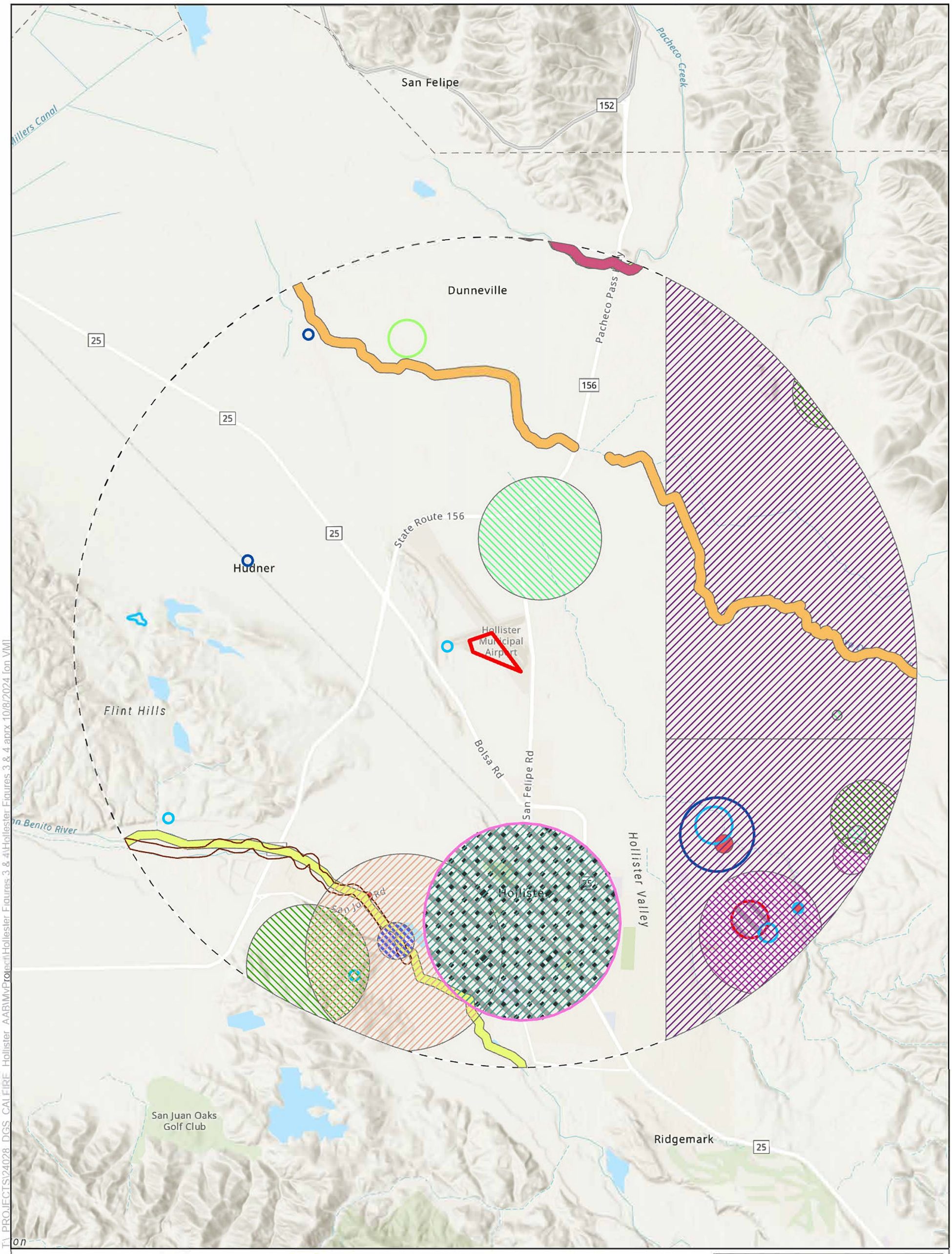


Figure 3.4-2
CNDDB Occurrence Records for Special-Status Animal Species within 5 Mile Radius of Project Area

CAL FIRE Hollister Air Attack Base Relocate Facilities Project

MONTROSE ENVIRONMENTAL Data Source: CNDDB October 2024, CDFW

3.4.3 Discussion of Checklist Responses

a. Substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species—Less than Significant with Mitigation

The biological resources report completed for the Proposed Project (Montrose 2024) concludes that although not expected to occur, seven special-status wildlife species could not be ruled out as having at least some potential to occur on the project site. This includes Crotch's bumble bee (Candidate for listing under CESA), California tiger salamander – Central California Distinct Population Segment (DPS) (Federally Threatened, State Threatened), western spadefoot (Federally Proposed Threatened, Species of Special Concern), western burrowing owl (Candidate for listing under CESA), Swainson's hawk (State Threatened), white-tailed kite (Fully Protected), golden eagle (Fully Protected), and American badger (Species of Special Concern). Each of these species are addressed below.

Crotch's bumble bee

The project site may provide marginally suitable foraging habitat for Crotch's bumble bee (*Bombus crotchii*), as suitable food plant sources were observed on site and in the vicinity of the site (Montrose 2024). Although they may forage on site, they are not expected to overwinter or nest due to anthropogenic disturbance and significant habitat modifications. This species has a low potential to forage in the project area. Implementation of **Mitigation Measures BIO-1, BIO-2, and BIO-3** would minimize impacts to Crotch's bumble bee by conducting environmental awareness training, minimizing and delineating work limits, and conducting a pre-activity survey for Crotch's bumble bee if work occurs during the species flight season.

Mitigation Measure BIO-1: Conduct Worker Environmental Training

Prior to the start of construction activities, all personal working on the site shall receive an environmental training by a qualified biologist. The training will include information on the special-status species that may occur in the work area, including identification, legal status, and project-required protective measures.

Mitigation Measure BIO-2: Minimize and Delineate Work Limits

Temporary impact areas shall be kept to the minimum size necessary and, to the extent feasible, staging and laydown areas shall utilize existing paved areas. Prior to commencing construction activities, a qualified biologist will clearly delineate the work limits in the field with highly visible flagging or fencing.

Mitigation Measure BIO-3: Conduct Pre-activity Survey for Crotch's Bumble Bee

If ground-disturbing or vegetation-disturbing project activities are conducted during the flight season/active period for Crotch's bumble bee (February through October), a pre-construction survey shall be conducted by a qualified biologist to search for active nest sites. Surveys shall be conducted within 14 days prior to ground- or vegetation-disturbing activities and shall be consistent with nesting survey recommendation in the CDFW *Survey Considerations for California Endangered Species Act (CESA) Candidate*

Bumble Bee Species (2023). If an active nest is detected, an appropriate no-disturbance buffer zone shall be established and site-specific measures to avoid take should be developed by a qualified biologist. If take of Crotch's bumble bee or its nest cannot be avoided, additional consultation with CDFW will be required to obtain a project-specific take permit.

California tiger salamander and western spadefoot

Although unlikely, there is a low potential for California tiger salamander to occur in underground refugia in annual grassland habitat within the project site, or to migrate through the site during winter rain events. There is no aquatic habitat on site, therefore there is no potential for breeding to occur. No known breeding ponds are present within dispersal distance (1.3 miles) of the study area; however, unidentified ponds may be present (Montrose 2024). There is a 2007 record from 0.2 mile west of the project site at the western edge of the Hollister Municipal Airport, where an adult California tiger salamander was found deceased at the entrance of a mammal burrow (CDFW 2024a). The annual grassland habitat in at the project site provides potential refuge sites (small mammal burrows); however, refugia are limited due to ground squirrel control and disking that occur under routine maintenance. Taxiways and airport infrastructure would act as barriers to tiger salamander movement from the north and east of the study area, and roadways, airport infrastructure, and industrial development would present significant barriers to movement from the south and west (Montrose 2024).

The project site does not provide breeding (aquatic) habitat for western spadefoot but may provide marginally suitable upland habitat if any breeding pools are present within dispersal distance, which has been reported up to 1,984.91 feet (605 meters) (USFWS 2023). Annual grassland habitat at the project site provides potential refuge sites (small mammal burrows); however, refugia are limited due to ground squirrel control and disking. Although not expected, the species may occur in underground refugia in annual grassland habitat within study area.

Implementation of Mitigation Measures BIO-1, BIO-2, **BIO-4,** and **BIO-5** would minimize impacts to California tiger salamander and western spadefoot by conducting environmental awareness training, minimizing and delineating work limits, avoiding work during winter rain events, and conducting ground-disturbance monitoring.

BIO 4: Conduct Biological Monitoring During Winter Rain Events

If present, special-status amphibians are most likely to be encountered during winter rain events when they may be migrating to breeding sites. Therefore, construction activities should be avoided during and within 24 hours after winter rain events (defined as 0.25 inch of rain or greater as reported by the National Oceanic and Atmospheric Administration). If construction activities are scheduled to occur during or within 24 hours after a rain event, the activities shall be monitored by a qualified biologist. The biologist shall inspect the work areas for special-status amphibians throughout the workday. If any western spadefoot individuals are found, a qualified biologist with appropriate CDFW authorization may relocate the animal to a suitable burrow outside of the project impact area footprint. If any California tiger salamanders are found, a minimum 200-foot no-disturbance buffer shall be established around the animal. The qualified biologist shall have authority to implement additional prudent measures as

necessary to protect the animal. The USFWS shall be contacted within 24 hours of any detection of California tiger salamander on site to determine appropriate steps.

BIO 5: Conduct Ground-disturbance Monitoring

A qualified biologist familiar with California tiger salamander and western spadefoot shall be present to monitor for special-status amphibians that may be unearthed during initial ground-disturbance (i.e., clearing, grubbing, grading) activities. The biologist shall have authority to stop work if either species is found during initial ground disturbance. If any western spadefoot individuals are found, the qualified biologist with appropriate CDFW authorization may relocate the animal to a suitable burrow outside of the project impact area footprint. If any California tiger salamanders are found, a minimum 200-foot no-disturbance buffer shall be established around the animal and further initial-ground disturbance activities in annual grassland habitat shall cease until the USFWS has been contacted to determine appropriate steps. The USFWS shall be contacted within 24 hours of any detection of California tiger salamander on site.

Western burrowing owl

Western burrowing owl has the potential to forage at the project site but is unlikely to den or nest due to the anthropogenic disturbance within the airport and significant habitat modifications from routine maintenance, including disking of burrows and management for ground squirrels. The species is not expected to occur on the project site but cannot be entirely ruled out. Implementation of Mitigation Measures BIO-1, BIO-2, and **BIO-6** would minimize potential impacts to western burrowing owl by conducting environmental awareness training, minimizing and delineating work limits, and conducting pre-construction surveys for burrowing owls.

BIO 6: Conduct Pre-construction Survey(s) for Burrowing Owls

Prior to initiating ground-disturbing activities, surveys for burrowing owls shall be conducted in accordance with protocols established in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012 or current version). If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be resurveyed. If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the *Staff Report on Burrowing Owl Mitigation*, and at the discretion of a qualified wildlife biologist. Buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the breeding season, and 160 feet (100 meters) during the non-breeding season. Buffer distances shall be subject to approval of the CDFW.

If occupied burrows cannot be avoided, passive owl relocation techniques may be implemented outside of the nesting season. Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe

shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

If occupied burrows are relocated, the project proponent shall enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, the project proponent shall develop and implement a monitoring and management plan to assess the effectiveness of the mitigation. The plan shall be subject to approval of the CDFW.

Swainson's hawk, white-tailed kite, and golden eagle

Swainson's hawk, white-tailed kite, and golden eagle each have a low potential to forage on the project site, with no potential to nest on or immediately adjacent to the project site due to a lack of suitable nesting habitat for any of the species. The animals would likely avoid the area during construction, or if present, could easily flee the area. Impacts to foraging Swainson's hawk, white-tailed kite, or golden eagle would be less than significant and no mitigation measures are required.

American badger

Although of marginal quality, the annual grassland habitat within the study area provides some suitable foraging habitat for American badger, with suitable prey species, including burrowing rodents and other small vertebrates, along with habitat for dens and burrows. Badgers are highly mobile and may move onto the site from adjacent areas. Due to the routine disturbance of the annual grassland habitat and management for ground squirrels, there is a low potential for American badger to occur. Implementation of Mitigation Measures BIO-1, BIO-2, and **BIO-7** would minimize impacts to American badger by conducting environmental awareness training, minimizing and delineating work limits, and conducting a pre-activity survey for the species prior to the start of project activities.

Mitigation Measure BIO-7: Conduct Pre-activity Survey for American Badger

Within 7 days prior to the start of project activities, including staging, a pre-activity survey for American badger shall be conducted by a qualified biologist. The survey shall include the work area plus a 50-foot buffer surrounding the work area. If an active American badger den is found, a no-disturbance buffer shall be placed by the qualified biologist. The buffer for an active American badger den during the breeding season (March through August) shall be a minimum of 50 feet based on the discretion of a qualified biologist. The buffer for an active American badger den during the non-breeding season shall be determined by the qualified biologist but may be less than 50 feet.

With implementation of Mitigation Measures BIO-1 through BIO-7, impacts to special-status species would be **less than significant with mitigation.**

Birds Protected under the Migratory Bird Treaty Act

Nesting birds

The project site contains suitable nesting habitat for many avian species protected by the MBTA. Ground disturbance and clearing of vegetation as a result of the Proposed Project could destroy (e.g., crush, remove) active nest sites, if present, on the site during construction. Additionally, noise and disturbance associated with construction of the Proposed Project could adversely affect nesting birds in adjacent areas to the point of nest abandonment and/or failure. Because the potential loss of an active bird nest during construction would potentially violate protections under the MBTA and F&G Code, such an impact is considered significant. Implementation of **Mitigation Measure BIO-8** would minimize impacts to nesting birds protected by the MBTA by requiring pre-construction surveys and establishment of non-disturbance buffers around active nests.

Mitigation Measure BIO-8. Conduct Pre-construction Surveys for Nesting Birds

To avoid and minimize potential impacts to bird species protected by the MBTA and F&G Code, construction activities should be scheduled, to the extent feasible, to avoid the nesting bird season. The typical nesting season extends from February 1 through August 31. If project activities are scheduled to take place during the nesting season, the following measures shall be implemented:

- A qualified biologist shall conduct pre-construction surveys for nesting birds. These surveys shall be conducted no more than 7 days prior to the initiation of ground-disturbing or vegetation-disturbing activities. During these surveys, the biologist shall inspect all potential nesting habitats (e.g., shrubs, annual grasslands, and structures) in and immediately adjacent to the construction areas for nests.
- If an active nest is found sufficiently close to work areas to be disturbed by project activities, a non-disturbance buffer zone shall be established around the nest. The size and location of the non-disturbance buffer shall be at the biologist's discretion based on the species, sensitivity to disturbance, and nest placement. Buffer zones shall remain in place until the birds have fledged or the nest is no longer active, as determined by a qualified biologist. Active bird nests cannot be relocated, disturbed, or destroyed under MBTA and F&G Code regulations.
- If construction activities are halted or paused for more than 7 days, the pre-activity survey shall be repeated to check for new nests that may have become established.

With implementation of Mitigation Measure BIO-8, impacts to nesting birds protected by the MBTA would be **less than significant with mitigation.**

Summary

The Proposed Project would impact routinely disturbed non-native annual grassland habitat that is within the Hollister Municipal Airport. Nesting birds may occur during the nesting season, and although unexpected, there is a low potential for seven special-status species to occur on the project site. Impacts to the annual grassland habitat would be permanent. With the

implementation of Mitigation Measures BIO-1 through BIO-8, impacts to candidate, sensitive, or special-status species are anticipated to be **less than significant with mitigation.**

b. Substantial adverse effect on any riparian habitat or other sensitive natural community—No Impact

Based on the biological resources report completed for the Proposed Project, habitat on site is limited to non-native annual grassland, which is not considered a sensitive natural community. No riparian habitat is present. Therefore, there would be **no impact** to these resources.

c. Substantial adverse effects on state or federally protected wetlands—No Impact

No state or federally protected wetlands are present on the project site; therefore, there will be **no impact** to these resources.

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

A review of the CDFW Areas of Conservation Emphasis (ACE) Terrestrial Connectivity dataset shows the project site is mapped with a Connectivity Rank of 1, or limited connectivity opportunity (CDFW 2024b). The project site is not located within an established wildlife corridor. The project site is located at the southern end of the Hollister Municipal Airport, which already deters any substantial wildlife movement through the area due to existing airport activities, the built-up environment, and the enclosure of the property by existing fencing. As discussed, there is no aquatic habitat on site that would provide potential breeding sites for special-status amphibians. Additionally, the project site is not situated between any known aquatic breeding sites for special-status amphibians. Although nesting birds may utilize the annual grassland during the nesting season, nesting would be limited to ground-nesting species, as there are no trees or large shrubs present. Impacts associated with the movement of native resident or migratory wildlife species or wildlife corridors would be **less than significant**. Therefore, no mitigation is required.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance—No Impact

The City of Hollister's local policies and ordinances protecting biological resources are not applicable to the Proposed Project because it is a State project. Additionally, the Proposed Project does not involve the removal of any trees, nor are there any substantial conflicts with the City's local policies and ordinances pertaining to biological resources. Therefore, there would be **no impact**.

f. Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP—No Impact

The project site is not within the covered plan area of any adopted habitat conservation plan (HCP) or natural community conservation plan (NCCP). The San Benito County Resource Management Agency has initiated the process of developing a county-wide HCP/NCCP called the San Benito County Conservation Plan, which is proposed to cover the entire county, including the project site. However, the plan is still in the development stage and, therefore, not applicable to the Proposed Project. There would be **no impact** related to conflicts with an adopted HCP or NCCP.

3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

The term "cultural resources" refers to sites, objects, buildings, structures, burials, and cultural landscapes. Cultural resources can also be classified as built-environment resources, archaeological resources, and human remains. Built-environment resources generally refer to above-ground designed, constructed, and landscape features and include buildings, structures, objects, and districts. Archaeological resources generally refer to deposits, structural features, and objects below ground. Human remains are also addressed in this section.

The following discussion regarding cultural resources is adapted from the Cultural Resources Inventory Report, CAL FIRE Hollister Air Attack Base Relocation Project, San Benito County (Montrose 2024).

3.5.1 Regulatory Setting

Federal Laws, Regulations, and Policies

At this time no federal regulations are known to be applicable for the Proposed Project; however, if regulations do become triggered by federal involvement, the cultural resource analysis prepared for the purposes of this project have been conducted to comply with these federal regulations, as described below.

National Historic Preservation Act and National Register of Historic Places

The National Register was authorized by Section 101 of the National Historic Preservation Act (NHPA) as the nation's official list of cultural resources worthy of preservation. Properties listed in the National Register of Historic Places (NRHP) consist of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. Properties listed in or eligible for listing in the National Register are considered in planning and environmental review; the effects of such properties are primarily addressed under Section 106.

The implementing regulations of the NHPA, found at 36 CFR Part 800, require that cultural resources be evaluated for NRHP eligibility if they cannot be avoided by an undertaking.

The criteria for determining a resource's eligibility for a National Register listing are defined in 36 CFR Part 60.4 and are as follows:

> ...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 significant people 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, important information in prehistory or history.

As provided in Title 36 CFR Part 60.4, "the quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association" and must be considered within the historic context. Resources must also be at least 50 years old, except in rare cases, and, to meet eligibility criteria of the NRHP, must:

(A) Be associated with events that have made a significant contribution to the broad patterns of our history; or

(B) Be associated with the lives of persons significant in our past; or

(C) 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) Have yielded, or may be likely to yield, information important in prehistory or history.

Under Criteria A, B, and C, the National Register places an emphasis on a resource appearing as it did during its period of significance to convey historical significance; under Criterion D, properties convey significance through the information they contain.

National Register Bulletin How to Apply the National Register Criteria for Evaluation states that in order for a property to qualify for listing in the National Register, it must meet at least one of the National Register criteria by (1) being associated with an important historic context and (2) retaining historic integrity of those features necessary to convey its significance (National Park Service 1997). The historic context of a resource will define the theme(s), geographical limits, and period of significance by which to evaluate a resource's significance (National Park Service 1997:7).

Generally, cultural properties must be 50 years of age or older to be eligible for listing on the National Register. According to the National Park Service (1997:2), "properties that have achieved significance within the past 50 years shall not be considered eligible" unless such properties are "of exceptional importance."

Although archaeological sites must be evaluated according to all of the criteria listed above, they are most often found eligible for listing in the NRHP under criterion (D). For sites found eligible under criterion (D), integrity requires that the site remain sufficiently intact to convey the expected information to address specific important research questions.

State Laws, Regulations, and Policies

CEQA and State CEQA Guidelines

The Proposed Project must comply with CEQA (Pub. Res. Code 21000 et seq.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Chapter 3), which determine, in part, whether the project has a significant effect on a unique archaeological resource (per Pub. Res. Code 21083.2) or a historical resource (per Pub. Res. Code 21084.1).

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Although not specifically inclusive of paleontological resources, these criteria may also help define "a unique paleontological resource or site" (refer to Section 3.7).

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA Section 21083.2.

CEQA Guidelines Section 15064.5 notes that "a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are required to identify potentially feasible measures or alternatives to avoid or mitigate significant adverse changes in the significance of a historical resource before such projects are approved. According to the CEQA Guidelines, historical resources are:

- Listed in, or determined to be eligible for listing in, the California Register of Historical Resources (per Pub. Res. Code 5024.1(e));

- Included in a local register of historical resources (per Pub. Res. Code 5020.1(k)) or identified as significant in a historical resource survey meeting the requirements of Pub. Res. Code 5024.1(g); or
- Determined by a lead state agency to be historically significant.

CEQA Guidelines Section 15064.5 also prescribe the processes and procedures found under Health and Safety Code Section 7050.5 and Pub. Res. Code Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within a project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

California Register of Historical Resources

Pub. Res. Code Section 5024.1 establishes the California Register of Historical Resources (CRHR). This register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed, or determined to be eligible for listing, in the NRHP, including properties evaluated under Section 106 of the NHPA. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

(1) Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(2) Are associated with the lives of persons important in our past;

(3) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or

(4) Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

Unique Archaeological Resources

CEQA Guidelines Section 15064.5 also applies to unique archaeological resources pursuant to Pub. Res. Code Section 21084.1. As defined in Pub. Res. Code Section 21083.2, a unique archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or

- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The CEQA Guidelines note that if an archaeological resource is not a unique archaeological resource, historical resource, or tribal cultural resource, the effects of the project on that cultural resource shall not be considered a significant effect on the environment (Section 15064.5[c][4]).

Local Laws, Regulations, and Policies

Local laws, regulations, and policies are listed in Appendix A.

3.5.2 Environmental Setting

The following sections describe the environmental setting that pertains to impacts on cultural resources.

Pre-Contact Setting

The pre-contact, or prehistoric, period reflects information known about the indigenous population from the time the region was first populated with humans until the arrival of the first Europeans who recorded their journeys. The prehistoric record is derived from over a century of archaeological research; while much has been gleaned from these studies, large gaps in the data record remain. The following pre-contact culture sequence, derived from Jones et al. (2010: 134-146) and Milliken et al. (2009:70-74), briefly outlines the indigenous history of the Central Coast/Monterey Bay Area region.

The Early Holocene, which includes the Paleo-Indian Period (pre-8000 B.C.) and the Millingstone/ Early Archaic Period (8000 to 3500 B.C.), is considered a time when populations were very mobile as they practiced a foraging lifestyle around the region. Large quantities of handstones, milling slabs, and core tools, as well as lesser quantities of flake tools and large side-notched projectile points, are characteristic of Millingstone/Early Archaic Period assemblages.

The Middle Holocene encompasses both the Early Period (3500 to 600 B.C.) and Middle Period (600 B.C to A.D. 1000) and is marked by large projectile points, the presence of the mortar and pestle, and an increase in interregional trade. The mortar and pestle are believed to represent intensive acorn processing and the beginnings of sedentary villages. Artifacts that are characteristic of these periods include contracting-stemmed projectile points, bone gorges, and shell beads. The predominance of milling slabs and handstones in the Early Period suggests the continuation of a foraging lifestyle. In the Monterey Bay Area, the Early/Middle Transition may have been a period of cultural collapse, as indicated by the large decrease in inhabited sites. Site occupation returned to earlier levels by 200 B.C. Increased mortar/pestle representation and terrestrial faunal remain densities, as well as increased population levels, suggest the establishment of a more sedentary, territorial lifestyle during the Middle Period.

The Middle/Late Transition Period (A.D. 1000 to 1250) is represented by dramatic shifts in material culture, such as the bow and arrow, shell fishhooks, and changes in shell bead forms. The Late Period (A.D. 1250 to 1769) reflects a time of social complexity, population growth, and economic intensification. Characteristic artifacts of this period include arrow points, bead drills,

bedrock mortars, and steatite beads. In the Monterey Bay Area, the local Late Period culture is referred to as the San Carlos Ranch Phase and is best characterized as an incipient collector pattern. The first projectile point associated with the bow and arrow in the Monterey Bay Area was the Desert side-notched point, which spread to the area sometime after A.D. 1200.

Increased use of bedrock mortars, exploitation of lower-ranked resources, and increased use of locally available materials in tool production suggest economic intensification and heightened territoriality during the Late Period. The concurrent increase of beads and decrease of interregional trade materials may represent a more standardized exchange method. Late Period occupation sites are typically represented by small middens with associated or nearby bedrock mortars. Residential features remain uncommon, but a handful of circular house floors are associated with this period.

The Late Period culminates with intensified European contact in the eighteenth century. The Spanish made brief stops on California's Central Coast as early as 1542, but long-term contact was not initiated until the Portola overland expedition in 1769. Ethnohistoric accounts describe Late Period and contact-era populations as a large number of small, autonomous, and mobile tribelets.

Ethnography

The language spoken by the population indigenous to the project area belongs to a language family referred to as Costanoan, a derivative from a Spanish term for "coast people." Costanoan, which consist of six known languages and various dialects within those languages, was spoken over a broad territory that included all of the San Francisco Peninsula, along the east and south of San Francisco Bay, and south to Monterey Bay, Salinas Valley, and the area around Hollister (Milliken et al. 2009:33-35). Those populations residing in the project area spoke the Mutsun language (Levy 1978: 485).

The Costanoan peoples, also referred to as the Ohlone, Mutsun, or Rumsen, depending on geography, were not a united cultural or political entity (Milliken et al. 2009:2-4). Rather, there were strong differences not only in language, but also in culture, between the San Francisco and Monterey Bay occupants. Political affinity was based on the tribelet, which comprised one or more villages within a specific geographic territory (Levy 1978:487).

The tribelet territory was 10 to 12 miles in diameter and contained a population of 200 to 400 people living among four or five villages (Milliken et al. 2009:99). Those living in the present-day project area resided in large villages along permanent streams in locations that allowed access to the diverse resources found in the tidal marshlands, valley floor, and hills (Milliken et al. 2010:106; Moratto 2004:225).

Several Costanoan tribes lived within modern-day San Benito County. Mutsun-speaking groups included the Ausaima, Motssum, and Pagsin. By 1797, the Mutsun-speaking people were familiar with the Spanish due to the establishment of the Santa Clara, Santa Cruz, and Carmel missions. Mission San Juan Bautista was founded in 1797 in the territory of the Motssum tribe. A total of 2,781 indigenous people, predominantly Mutsun speakers, were baptized at Mission San Juan Bautista between 1797 and 1840. In 1800, the last large groups of Motssums, a large segment of the Ausaimas, and the first large group of Pagsins were converted at Mission San Juan Bautista. Large groups of Yokut speakers began arriving to Mission San Juan Bautista in

1817, and eventually rivaled Mutsun speakers in size by 1834 (Milliken et al. 2009). The secularization of the mission system in 1835 led to the establishment of a multi-ethnic indigenous community in San Juan Bautista made up of previous mission occupants (Levy 1978).

Today, the Ohlone/Costanoan reside throughout the region and strive to maintain their cultural traditions. Given the diversity of the language and the wide geographic range of indigenous occupation, there are a number of tribal groups in the Central Coast and the San Francisco Bay Area today who represent the Ohlone/Costanoan people.

Post-Contact Setting

The historic era began in the San Francisco Bay Area and Central Coast when Spanish explorers arrived in the late 1760s and the 1770s. The first documented interaction between Costanoan speaking people and Europeans occurred at Monterey Bay, with the landing of Sebastián Vizcaíno in 1603. The next documented interaction does not occur until 1769 with the arrival of Gaspar de Portola's expedition, which travelled up the coast by land from San Diego. After arriving in Monterey Bay, the group explored the Monterey Peninsula before continuing northward to the San Francisco Bay. The Portola party retraced their route south as they traveled back to San Diego. The Spanish returned in 1770 and founded seven missions in Costanoan territory between 1770 and 1797 (Milliken et al. 2009).

As previously discussed, Mission San Juan Bautista was founded in 1797 by Father Fermín Lasuén. The land of Mission San Juan Bautista was expropriated to José Castro, then interim governor of California, as a result of the mission secularization of 1835 (Kyle et al. 2002).

Francisco Pérez Pacheco was a Mexican carriage maker who arrived in California in 1819 and settled on Mission San Juan Bautista land sometime before 1833. He eventually acquired extensive land holdings and was conveyed the 34,619-acre San Justo Rancho by Governor José Castro in 1844. Pacheco sold Rancho San Justo in 1855 to W. W. Hollister and Flint, Bixby, and Company, who turned it into a sheep ranch (Kyle et al. 2002; Shapiro 1992).

After California statehood in 1850, the Mexican land grant period was supplanted by the American period. In 1868, a group of 50 farmers formed the San Justo Homestead Association. They purchased 21,000 acres of the eastern portion of Rancho San Justo from Colonel W. W. Hollister for $400,000. The land was then divided into 50 homestead lots with 100 acres reserved in the middle for a town site, which is now the center of Hollister. San Benito County was carved out from Monterey County in 1874, and the town of Hollister became the county seat (Kyle et al. 2002).

Hollister Municipal Airport

The Hollister Municipal Airport (CVH) began as a private airfield in 1912. It was known as the Turner Field after it was acquired by Everett Turner in the mid-1920s. The U.S. Navy purchased the property and airfield in 1941 and built the Navy Air Auxiliary Station (N.A.A.S. Hollister) in 1942. N.A.A.S. Hollister was one of several facilities built to support the Alameda Naval Station during World War II and was primarily built to provide fleet air training and munitions storage. At its peak, N.A.A.S. Hollister housed 200 to 300 Navy personnel. N.A.A.S. Hollister operated as a military base until 1946 and was turned over to the City of Hollister in 1947. Today, the CVH provides general aviation services. Much of the land surrounding the airport is currently used for

agriculture or open space (Coffman Associates 2018; Hollister Municipal Airport 2005; U.S. Bureau of Yards and Docks 1947).

Cultural Resources Studies

Archival Search

A record search was requested at the Northwest Information Center (NWIC) to determine whether any portions of the project area had been surveyed previously for cultural resources and to identify the presence of any previously recorded cultural resources within the project area, including a 0.25-mile buffer (the search radius). The record search results were received on August 6, 2024 (NWIC File No. 24-0046). According to the record search, the boundaries of five previous studies intersect the project area. Nine previous studies intersect the search radius. The studies in the project area are listed in **Table 3.5-1.**

Table 3.5-1. Studies within the Area of Potential Effects

Report No.	Author(s)	Year	Title
S-5228	Gary S. Breschini, Trudy Haversat, and Glory Anne Laffey	1980	Preliminary Archaeological Reconnaissance and Historical Overview of the Proposed Hollister Sewer Project, Hollister, San Benito County, California.
S-14418	Lisa A. Shapiro	1992	Cultural Resources Investigation of the Proposed Area-Wide Sanitary Sewer Project, City of Hollister, San Benito County, California
S-22728	Lynn Compas	2000	Cultural Resources Inventory for the California Department of Forestry and Fire Protection, Hollister Air Attack Base Relocation Project, San Benito County, California
S-23146	W. A. Waldron and Bonnie W. Parks	1990	Historic Property Survey Report and Preliminary Evaluation of Effects for the Proposed Hollister Bypass Project in San Benito County, California, 05-SBT-156 P.M. 7.3/ 14.3 05201 027100
S-43945	Damon Mark Haydu	2008	Cultural Resources Study of the Proposed Hollister Municipal Airport Reclaimed Water Irrigation System Project (letter report)

Additionally, the record search identified one resource that has been previously recorded within the project area (P-35-000339), as well as four resources that have been previously recorded within the search radius, in addition to one informal resource; none have been identified as CRHR- or NRHP-listed historical resources or properties. **Table 3.5-2**, below, details the previously recorded resources within the project area and search radius.

Table 3.5-2. Previously Recorded Resources within the Project Search Radius

Primary No.	Name/Description	Type A	Age
Resources Previously Identified within the Project Area			
P-35-000339	Hollister Fire Station 1 (Charles Barton Site)	Building, Site	Historic
Resources Previously Identified within the Search Radius			
P-35-000306	460 Briggs Road, Hollister	Building	Historic
P-35-000316	OB-25, MB-25, Highway 25	Structure	Historic
P-35-000657	1940 Bolsa Road	Building	Historic
P-35-000670	Bolsa Road	Structure	Historic
Informal Resources Previously Identified within the Search Radius			
N/A	385B-001	Unknown	Unknown

Source: NWIC Record Search File No. 24-0046

According to Compas (2000), P-35-000339 is in the field adjacent to the CVH runway and consists of the remains of a magazine area associated with N.A.A.S. Hollister. The remains include the foundation of a radio transmitter, two magazines, two Quonset huts, and one inert storage facility, which is on the only remaining foundation from this site. The inert storehouse likely held ammunition and components that did not contain explosive or energetic material while the magazine area of N.A.A.S. Hollister was operational. Compas (2000: 6) considered P-35-000339 to be ineligible for CRHR listing because less than a quarter of the original buildings remain, and those that do are typical of wartime military construction. Furthermore, the historical context has been altered by modern airport facilities and the loss of most structures. As such, the magazine area does not meet the criteria for historical significance under California's CEQA guidelines.

Other sources of information reviewed included, but were not limited to, the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest, as listed in the Office of Historic Preservation's (OHP's) Historic Property Directory, and the Built Environment Resource Directory (BERD) for San Benito County (OHP 2020).

Geoarchaeological Context

To assess the potential for buried archaeological sites within a project area's components, an investigation will often consider factors that either encouraged or discouraged human use or occupation of certain landforms (e.g., geomorphic setting and distance to water), combined with those that affected the subsequent preservation (i.e., erosion or burial) of those landforms. It is well known, for instance, that prehistoric archaeological sites in California are most often found on relatively level landforms near natural water sources (e.g., spring, stream, river, or

estuary), which is often where two or more environmental zones (ecotones) are present. Landforms with this combination of variables are frequently found at or near the contact between a floodplain and a higher and older geomorphic surface, such as an alluvial fan or stream terrace (Hansen 2004:5).

In general, most Pleistocene-age landforms have little potential for harboring buried archaeological resources as they developed before the first evidence of human migration into North America (ca. 13,000 years ago). However, Pleistocene-age or older surfaces buried below younger Holocene deposits do have a potential for containing archaeological deposits because of the long-term viability of the platform (or Pleistocene-age surface) from which occupation can occur. Holocene alluvial deposits may contain buried soils (paleosols) that represent periods of landform stability before renewed deposition. The identification of paleosols within Holocene-age landforms is of particular interest because they represent formerly stable surfaces that have a potential for preserving archaeological deposits.

The potential for the project area to contain buried archaeological resources was investigated using a model formulated by Rosenthal et al. (2003) for predicting a location's sensitivity for buried Native American archaeological sites based on the age of the landform, slope, and proximity to water.

A location is considered to have the highest sensitivity if the landform dates to the Holocene, has a slope of 1 to 8 percent and is within 100 meters (328 feet) of fresh water (e.g., Ana Creek to the west). A basic premise of the model is that Native American archaeological deposits will not be buried within landforms that predate human colonization of the area. Calculating these factors using the buried site model (Rosenthal et al. 2003: Tables 21 and 23), a location's sensitivity is assigned a zone based on the probability of encountering one buried archaeological site per 0.1 square kilometer (km2). The subsurface sensitivity zones are classified as follows: very low (<1%); low (1-2%); moderate (2-3%); high (3-5%); very high (5-20%).

Based on landform age and the other factors described above, the model indicated that the sensitivity for buried sites in the project area is considered high. A review of Wagner et al. (2002) – from which the Rosenthal et al. (2003) analysis is partially derived – and Dibblee (2006) indicates that the project area is entirely underlain by Holocene alluvium, which increases the sensitivity for buried deposits.

Native American Outreach

An email request was made to the Native American Heritage Commission (NAHC) on July 12, 2024, to review its files for the presence of recorded sacred sites in the project area. The NAHC responded on July 30, 2024. The result of the Sacred Lands database review was positive for the region surrounding the project area. On October 29, 2024, letters were sent to the 12 tribal contacts provided by the NAHC. The letters requested information regarding tribal resources and invited tribes to consult pursuant to Assembly Bill (AB) 52, if desired. To date, no responses have been received. As planning proceeds, the State will continue to consult with interested tribal representatives regarding the Proposed Project and incorporate their concerns into project planning and mitigation as warranted. Coordination with tribes is further described in Section 3.18, "Tribal Cultural Resources."

Cultural Resources Survey and Results

Archaeological Resources

A pedestrian archaeological survey was conducted of the project area on September 20, 2024, by qualified archaeologists who meets the U.S. Secretary of Interior's professional standards in archaeology. The area, altered by agriculture and CVH development, had high visibility due to recent plowing. No archaeological deposits were found, though one previously recorded resource (P-35-000339) was re-identified: the concrete foundation of an inert storage house. Other components of P-35-000339, such as a radio transmitter, magazines, Quonset huts, and a corrugated metal building, were not observed and likely removed between 2003 and 2004. Based on the survey and documentation, P-35-000339 was deemed ineligible for listing on the CRHR or NRHP. A total of approximately 65 acres of area was surveyed, including (1) a 45-acre area within the present-day boundary of CVH and (2) an approximately 20-acre area adjacent to the southern boundary of CVH at the intersection of Airway Drive and Aerostar Way.

3.5.3 Discussion of Checklist Responses

a. Adverse change in the significance of a historical resource—No Impact

A cultural resource review was conducted to address the responsibilities of CEQA, as codified in Pub. Res. Code Sections 5097 and its implementing guidelines 21082 and 21083.2. One previously recorded resource, P-35-000339, was reidentified within the project area during the field survey. The only remaining component of P-35-000339, as recorded by Compas (2000), was the concrete foundation of the inert storage house. No evidence of the other previously recorded components (the foundation of a radio transmitter, two magazines, and two Quonset huts) was observed. Aerial photographs suggest that the other components of P-35-000339 were removed sometime between 2003 and 2004. Additionally, no evidence of the corrugated metal building described by Compas (2000) as associated with the storehouse foundation was identified. An evaluation of P-35-000339 was conducted based on documentation review and survey observations, and the resource was recommended as ineligible for CRHR or NRHP listing. As a result, the Proposed Project would have a **no impact** to historical resources.

However, historical resources that are archaeological in nature may be accidentally discovered during project construction; archaeological resources are discussed further in Section 3.5.3(b) below.

b. Adverse change in the significance of an archaeological resource—Less than Significant with Mitigation

As described in item 3.5.3(a), a pedestrian archaeological survey was conducted of the project area. No new archaeological resources that could be adversely affected by the Proposed Project were discovered.

There is a higher sensitivity for buried deposits in areas underlain by Holocene alluvium. However, the project actions would take place in a location where previous disturbances for the construction of the airport and the previously extant N.A.A.S. Hollister base met or exceeded the levels of disturbance expected for the Proposed Project. While it is not expected that buried deposits would be discovered during project activities, in the case that they are, all work in the

vicinity should halt until a qualified archaeologist can evaluate the discovery and make recommendations in accordance with 36 CFR Section 800.13(b) to not disturb the resource(s). **Mitigation Measure CR-1** would ensure that the Proposed Project would not result in any substantial adverse effects to unexpected archaeological resources. With the implementation of Mitigation Measure CR-1, the Proposed Project would have an effect on archaeological resources that is l**ess than significant with mitigation**.

> **Mitigation Measure CR-1: Immediately Halt Construction If Cultural Resources Are Discovered, Evaluate All Identified Cultural Resources for Eligibility for Inclusion in the NRHP/CRHR, and Implement Appropriate Mitigation Measures for Eligible Resources.**
>
> CAL FIRE will include this measure in construction plans and specifications. If any cultural resources, such as structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains, are encountered during any project construction activities, work shall be suspended immediately at the location of the find and within a radius of at least 50 feet and CAL FIRE will be contacted.
>
> All cultural resources accidentally uncovered during construction within the project site and restoration area will be evaluated for eligibility for inclusion in the NRHP/CRHR. Resource evaluations will be conducted by individuals who meet the U.S. Secretary of the Interior's professional standards in archaeology, history, or architectural history, as appropriate. If any of the resources meet the eligibility criteria identified in Pub. Res. Code Section 5024.1 or Pub. Res. Code Section 21083.2(g), mitigation measures will be developed and implemented in accordance with CEQA Guidelines Section 15126.4(b) before construction resumes.
>
> For resources eligible for listing in the NRHP/CRHR that would be rendered ineligible by the effects of project construction, additional mitigation measures will be implemented. Mitigation measures for archaeological resources may include (but are not limited to) avoidance; incorporation of sites within parks, greenspace, or other open space; capping the site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for archaeological resources will be developed in consultation with responsible agencies and, as appropriate, interested parties such as Native American tribes. Native American consultation is required if an archaeological site is determined to be a tribal cultural resource. Implementation of the approved mitigation will be required before resuming any construction activities with potential to affect identified eligible resources at the site.

c. Disturbance of any human remains, including those interred outside of formal cemeteries—Less than Significant with Mitigation

No evidence of human remains was observed within the project area during pedestrian surveys. However, there continues to be a possibility that project-related construction may adversely affect human remains, although this is considered unlikely. Should any such remains be discovered during construction, the California Health and Safety Code Section 7050.5 requires that work immediately stop within the vicinity of the finds and that the county coroner be notified to assess the finds. Implementation of **Mitigation Measure CR-2** would ensure that the Proposed Project would not result in any substantial adverse effects

on human remains uncovered during construction by requiring that, if human remains are uncovered, work must be halted, and the county coroner must be contacted. Adherence to these procedures and provisions of the California Health and Safety Code would reduce potential impacts on human remains to a level that is **less than significant with mitigation**.

Mitigation Measure CR-2: Immediately Halt Construction if Human Remains Are Discovered and Implement Applicable Provisions of the California Health and Safety Code.

CAL FIRE will include this measure in construction plans and specifications. If human remains are accidentally discovered during project construction activities, the requirements of California Health and Human Safety Code Section 7050.5 will be followed. Potentially damaging excavation will halt in the vicinity of the remains, with a minimum radius of 100 feet, and the county coroner will be notified. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, they must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). Pursuant to the provisions of Pub. Res. Code Section 5097.98, the NAHC will identify a most likely descendent (MLD). The MLD designated by the NAHC will have at least 48 hours to inspect the site, once access is granted, and propose treatment and disposition of the remains and any associated grave goods. CAL FIRE will work with the MLD to ensure that the remains are removed to a protected location and treated with dignity and respect.

3.6 ENERGY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

3.6.1 Regulatory Setting

The following sections describe federal and state laws, regulations, and policies that are relevant to impacts that could result from Proposed Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

At the federal level, the USEPA and NHTSA set standards for passenger cars and light trucks for the CAFE standards and GHG emissions standards. The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provides incentives to reduce current demand on these resources. This act established energy-related tax incentives for energy efficiency and conservation; renewable energy; oil and gas production; and electricity generation and transmission. The act also increased the amounts of renewable fuel (e.g., ethanol or biodiesel) to be used in gasoline sold in the U.S., increased oil and natural gas production on federally owned lands, and established federal reliability standards regulating the electrical grid.

State Laws, Regulations, and Policies

Energy resource-related laws, regulations, and plans at the State level require the regular analysis of energy data, the development of recommendations to reduce statewide energy use, and setting of requirements on the use of renewable energy sources. Senate Bill (SB) 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report (IEPR) for the Governor and legislature every 2 years. The report contains an integrated assessment of major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors. It 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.

The 2023 IEPR identifies actions that the State and others can take to ensure a clean, affordable, and reliable energy system. The report highlights the gap between clean electricity

resources and projected goals and needs, in particular the need for electric vehicle chargers, heat pumps, and renewable electricity and storage. Noting that accelerated deployment of renewable resources and electrification has strained the electrical grid, the 2023 IEPR recommends strengthening ties between the development of electrification and decarbonization policies and regulations and the processes of electricity infrastructure planning and deployment.

Since 2002, California has established a Renewables Portfolio Standard program through multiple Senate bills (SB 1078, SB 107, SB 2 (IX), SB 350, and SB 100) and Executive Orders (S-14-08, B-55-18). The program requires that increasingly higher targets of electricity retail sales be served by eligible renewable resources. The established eligible renewable source targets include 33 percent of electricity retail sales by 2020, 60 percent by 2030, and 100 percent zero-carbon electricity for the State and statewide carbon neutrality by 2045.

The California Code of Regulations' Title 24 Building Energy Efficiency Standards are designed to ensure that new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality. The CEC, which is responsible for adopting, implementing, and updating building energy efficiency, updates the standards every 3 years by the CEC. Title 24 Part 6 covers the building envelope; space conditioning systems; water-heating systems; solar-ready buildings; and indoor, outdoor, and signage lighting. The energy code provides either a prescriptive or performance approach for compliance. Some mandatory measures must be met regardless of which compliance approach is used. California's Green Building Standards Code (CALGreen), Title 24 Part 11, is focused on improving public health, reducing environmental impacts, and encouraging sustainable construction in residential and nonresidential buildings by enhancing the design and construction of buildings. Multiple agencies have authority to propose CALGreen building standards. CALGreen includes mandatory measures to support the goals of the State's GHG reduction program and promotes healthful indoor and outdoor air quality. In addition to mandatory building standards, CALGreen encourages local governments to adopt more stringent voluntary provisions, known as Tier 1 and Tier 2 provisions, to further reduce air pollutant emissions, improve energy efficiency, and conserve natural resources.

EO B-18-12 requires the following actions to reduce the environmental impact of state facilities on climate change:

- All new State buildings and major renovations beginning design after 2025 shall be constructed as Zero Net Energy facilities.
- 50 percent of new facilities beginning design after 2020 shall be Zero Net Energy.
- State agencies shall take measures toward achieving Zero Net Energy for 50 percent of the square footage of existing State-owned building area by 2025.

Section 3.8, "Greenhouse Gas Emissions," provides additional details on CARB's *2022 Scoping Plan for Achieving Carbon Neutrality* (CARB 2022), which details the State's strategy for achieving its GHG targets, including energy-related goals and policies. These goals and policies include measures and actions that may pertain to the Proposed Project relating to vehicle efficiency and transitioning to alternatively powered vehicles.

3.6.2 Environmental Setting

California is second in the nation in electricity generation from renewable resources (solar, geothermal, and biomass resources) and is the seventh largest producer of crude oil among the 50 states (U.S. Energy Information Administration [EIA] 2024). California has the second highest total energy consumption in the U.S. but one of the lowest energy consumption rates per capita due to its mild climate and energy efficiency programs (EIA 2024). A comparison of California's energy-consuming end-use sectors indicates that the transportation sector is the greatest energy consumer, followed by the commercial, residential, and industrial sectors (EIA 2024). California is the largest consumer of jet fuel in the U.S. and the second largest consumer of motor gasoline (EIA 2024).

3.6.3 Discussion of Checklist Responses

a, b. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a state or local plan for renewable energy or energy efficiency—Less than Significant

The Proposed Project would require the consumption of energy (fossil fuels) for construction equipment, worker vehicles, and truck trips. **Table 3.6-1** shows the total estimated fuel use from construction equipment, worker vehicles, and truck trips. The baseline condition assumes that the existing CAL FIRE activities would not change except for the new building's energy use and fossil fuel use from the helicopters. **Table 3.6-2** shows the energy use for the incremental increase in operations. The calculations used to develop these estimates are presented in Appendix D.

Table 3.6-1. Construction Related Energy Use

Source Type	Gasoline Fuel Use (Gallons)	Diesel Fuel Use (Gallons)	Electricity Use (kWh)
Funded Construction Phase	15,275	40,474	14,200.41
Unfunded Construction Phase	284	6,961	263.83
Total for Construction	15,558	47,434	14,464

Note: kWh = kilowatt-hours

Source: Appendix D

Table 3.6-2. Operations Energy Use

Source Type	Jet Fuel (Metric Tons)	Diesel Fuel Use (Gallons)	Natural Gas (kBtu)	Electricity Use (kWh)
Operations On-Road Vehicles	652	56,328	918,635	603,950
Operations Off-Road Equipment	--	--	723,973	277,744
Total for Operations	652	56,328	1,642,607	881,693

Notes: kBtu = thousand British thermal units; kWh = kilowatt-hours
Additional jet fuel would be used by existing aircraft operations as well as additional diesel fuel for vehicles.

Source: Appendix D

As described in Chapter 2, *Project Description,* the Proposed Project's operations, including energy consumption, is necessary to implement CAL FIRE's response to wildfires from this strategically positioned attack base. These activities would not cause wasteful, inefficient, or unnecessary consumption of energy; a substantial increase in energy demand; or the need for additional energy resources. As a result, the Proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy.

In addition, the Proposed Project activities would not conflict with any of the goals, policies, or implementation actions identified in the applicable plans and would be completed as efficiently as possible. As an adequate supply of these fossil fuels is available in the area, the Proposed Project would not result in any peak demand issues. The Proposed Project would not require any substantial amounts of electricity and would not affect the amount or peak demand of electricity supply needed from the region. While the Proposed Project would not reduce fossil fuel reliance or specifically increase or encourage renewable energy generation, it would not impede future use of renewable energy sources. The unfunded aspects of the Proposed Project may include adding renewable energy in the form of photovoltaic panels. As such, the Proposed Project would not impede progress toward renewable portfolio goals or implementation of energy efficiency programs. Thus, the Proposed Project would not conflict with any plans relating to renewable energy or energy efficiency. The impact of the Proposed Project with regard to energy resources would be **less than significant**.

3.7 GEOLOGY, SOILS, AND SEISMICITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
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?	☐	☒	☐	☐

3.7.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Section 402 of the Clean Water Act/National Pollutant Discharge Elimination System

The CWA is discussed in detail in Section 3.10, "Hydrology and Water Quality." However, because Section 402 of CWA is also directly relevant to earthwork, additional information is provided here.

The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES program. As described in Section 3.10, the U.S. Environmental Protection Agency (USEPA) has delegated to the SWRCB the authority for the NPDES program in California, where it is implemented by the state's nine RWQCBs. Under the NPDES Phase II Rule, any construction activity disturbing 1 acre or more must obtain coverage under the state's General Permit for Storm Water Discharges Associated with Construction Activity (Construction General Permit). General Permit applicants are required to prepare a Notice of Intent stating that stormwater will be discharged from a construction site, and that a stormwater pollution prevention plan (SWPPP) describes the BMPs that will be implemented to avoid adverse effects on receiving water quality as a result of construction activities, including earthwork.

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: USGS; National Science Foundation; Federal Emergency Management Agency; and the National Institute of Standards and Technology. While changes have occurred in program details in some of the reauthorizations, the four basic NEHRP goals remain unchanged (NEHRP 2021):

(1) Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.

(2) Improve techniques for reducing earthquake vulnerabilities of facilities and systems.

(3) Improve earthquake hazards identification and risk assessment methods, and their use.

(4) Improve the understanding of earthquakes and their effects.

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

State Laws, Regulations, and Policies

California Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) (Pub. Res. Code Section 2621 et seq.) was enacted in 1972 to reduce the risk to life and property from surface fault rupture in California. The intent of the act is to prohibit construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulate construction in the corridors along active faults (earthquake fault zones).

The Alquist-Priolo Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. It also defines criteria for identifying active faults, which is defined if one or more of its segments or strands shows evidence of surface displacement in the last 11,000 years (California Department of Conservation [CDOC] 2024a). The act states that its intent is to "provide policies and criteria to assist cities, counties, and state agencies in the exercise of their responsibility to prohibit the location of developments and structures for human occupancy across the trace of active faults." The act also requires the State Geologist to compile maps delineating earthquake fault zones and to submit maps to all affected cities, counties and state agencies for review and comment.

Seismic Hazards Mapping Act

As with the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (SHMA) (Pub. Res. Code Sections 2690–2699.6) is intended to reduce damage resulting from earthquakes. The Alquist-Priolo Act addresses surface fault rupture, while the SHMA addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. The SHMA highlights the need to identify and map seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. Cities and counties are required to regulate development within mapped seismic hazard zones.

Under the SHMA, permit review is the primary mechanism by which development can be locally regulated. Specifically, cities and counties are prohibited from issuing development permits for sites within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been performed and measures to reduce potential damage have been incorporated into the development plans.

California Building Code and International Building Code

The State of California mandates minimum standards for building design through the California Building Code (CBC) (CFR Title 24). The CBC also specifies standards for geologic and seismic hazards, other than surface faulting to address seismic safety, earthquake-resistant design and construction (California Department of General Services [DGS] 2018). These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California. CBC standards determine building strength based on regional seismic risks and recommended construction specifications to provide building strength above that risk. The 2019 CBC was published in July 2019 with an effective date of January 1, 2020.

Local Laws, Regulations, and Policies

Local laws, regulations, and policies are listed in Appendix A.

3.7.2 Environmental Setting

Except where otherwise noted, information for the Environmental Setting was taken from the *Geotechnical Evaluation Final Design for Kern River Fish Hatchery Siphon and Pipeline, California Department of General Services, Kernville, California* (BKF Engineers 2023).

Geology

Regional Geology

The town of Hollister was built on the valley floor, called the Hollister Valley, of the southern end of the greater Santa Clara Valley. It extends northwestward to southern San Francisco Bay (Roger and Nason 1971). The Hollister Valley is a lowland basin with remnant of a prehistoric lake (City of Hollister 2020). The Quien Sabe Range is to the east of the Hollister Valley and the Gavilan Range is to the south. The city of Hollister is located within the vicinity of four fault zones which includes the San Andreas Fault, Quien Sabe Fault, the Tres Pinos Fault, and the Calaveras Fault. Movement along these faults are largely responsible for the landscape shape. The Hollister Municipal Airport is located next to the Calaveras Fault (CDOC 2024b).

The proposed site is mainly underlain by marine and nonmarine sedimentary rocks from the Pleistocene-Holocene age (CDOC 2024c). CDOC (2024c) describes the deposits as alluvium, lake playa and terrace deposits with mostly nonmarine deposits but includes marine deposits near the coast. Alluvial deposits into the Hollister Valley have occurred over thousands of years by the San Benito River (City of Hollister 2020).

Soils

Soils within the project area are classified as Pacheco silty clay (Natural Resources Conservation Service [NRCS] 2024). Adjacent to the project site, the soils are classified as Clear Lake clay drained, low precipitation, 0 to 2 percent slopes, Major Land Resource Area (MLRA) 14 (NRCS 2024).

Seismicity

The principal seismic hazards evaluated at the project site are surface rupture, ground motion, and liquefaction.

Surface Fault Rupture

The project site is adjacent to the Calaveras Fault line. Therefore, surface fault rupture from an active fault is considered likely.

Strong Seismic Ground Shaking

The project site is in a seismically active area, as is the majority of southern California, and the potential for strong ground motion in the project area is considered substantial during the life of

the Proposed Project. The USGS estimates that an earthquake of 6.7 or greater has a 7.4 percent likelihood of occurring within the next 30 years along the Calaveras Fault line (USGS 2016). The proximity of the site to active faults capable of producing strong ground shaking, means the project area has the potential for experiencing strong seismic ground shaking.

Liquefaction and Differential Settlement

Liquefaction is the phenomenon in which loosely deposited granular soils and low-plastic fine-grained soils located below the water table undergo rapid loss of shear strength due to excess pore pressure generation when subjected to strong earthquake-induced ground shaking. Sufficient ground shaking duration results in the loss of grain-to-grain contact due to a rapid rise in pore water pressure. This causes the soil to behave as a fluid for a short time. Liquefaction is generally known to occur in saturated or near-saturated cohesionless soils at depths shallower than 50 feet below the ground surface. Liquefaction is also known to occur in relatively fine-grained saturated non-plastic soils. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking.

The project site is not located in an area that has been evaluated for liquefaction potential. Wet sandy soils have the highest potential for liquefaction, and the project area is mostly underlain with silty clay soils which are not typically susceptible to liquefaction.

Differential settlement can result from liquefaction. However, silty clay soils are generally not susceptible to liquefaction.

Landslide and Slope Failure

The project site is generally flat, about 0 to 2 percent slope (NRCS 2024). Therefore, the chance of landslide and/or slope failure is low.

Lateral Spreading

Slopes can be subject to lateral spreading, depending on the characteristics of the soil at the site. In particular, seismically induced liquefaction can lead to lateral spreading. The project site soils are not anticipated to be subject to liquefaction.

Subsidence and Collapse

Subsidence can occur when substances such as oil or groundwater are removed in large quantity from underground. Collapse can occur when soils that are subject to collapse are present at a site and disturbed. Collapsable soils are present on site as silty clay, and alluvial deposit soils are considered collapsable (Caltrans 2024).

Paleontological Resources

Fossils are the geologically altered remains of a once-living organism and/or traces of its existence (such as footprints). Fossils occur in rocks, also known as geologic units. A *geological unit* is a volume of rock of identifiable origin and age range that is defined by the distinctive and dominant, easily mapped and recognizable petrographic, lithologic, or paleontological features (facies) that characterize it.

Unlike archaeological sites, which are narrowly defined, paleontological sites are defined by the entire extent (both areal and stratigraphic) of a geologic unit. Once a unit is identified as containing vertebrate fossils or other rare fossils, the entire unit is a paleontological site (Society for Vertebrate Paleontology [SVP] 2010). For this reason, the *paleontological potential* of geologic units, or the likelihood of a geologic unit to yield significant fossils, is described and analyzed broadly, rather than being limited to geographic boundaries. *Significant fossils*, according to SVP, are fossils and fossiliferous deposits consisting of identifiable vertebrate fossils; large or small, uncommon invertebrate, plant, and trace fossils; and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).

According to SVP (2010) procedures for the assessment and mitigation of impacts on paleontological resources, a geologic unit has high paleontological potential if it is known to contain vertebrate or significant invertebrate, plan, or trace fossils. A unit has undetermined paleontological potential if there is little information available concerning their paleontological content, geologic age, and depositional environment. A unit has low paleontological potential if existing studies by a qualified professional paleontologist indicate low potential for yielding significant fossils. A unit has no paleontological potential if they are too young to yield fossils or are formed in an environment that precludes fossils (such as some metamorphic rocks and plutonic rocks such as granites and diorites).

As stated above in "Regional Geology," the project site is underlain by marine and nonmarine sedimentary rocks from the Pleistocene-Holocene age that is described as alluvium, lake playa and terrace deposits with mostly nonmarine deposits but includes marine deposits near the coast. Almost all fossils are preserved in sedimentary rock (University of Colorado Boulder 2024). Pleistocene-aged rock have been found to yield fossils in San Benito County (University of California Museum of Paleontology [UCMP] 2024). All recorded specimens of this age in San Benito County in the UCMP database are vertebrate. Because there are several vertebrate fossils in San Benito County, it is assumed that there is potential for paleontological resources.

3.7.3 Discussion of Checklist Responses

The analysis below takes into account the 2015 California Supreme Court's holding in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 ("*CBIA v BAAQMD*") that CEQA does not generally operate "in reverse." That is, CEQA generally does not require analysis of the impact of the existing environmental conditions on future users or residents of a proposed project. The Court determined, "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." (*Id.* at p. 377). Evaluating "the environment's effects *on* a project…would impermissibly expand the scope of CEQA." (*Id.* at p. 387.) Thus, the court determined, "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." (*Id.* at p. 377).

In applying *CBIA's* holding with respect to geology, soils, seismicity, and paleontological resources, a proposed project that places structures or people in areas subject to geological hazards would only result in significant impacts if it were to exacerbate these existing geological

hazards or conditions. Therefore, the impacts analyses below focus on the extent to which the Proposed Project could exacerbate any existing geologic hazards or conditions that may already be present within the impact area.

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

i. Seismic-related rupture of a known earthquake fault—No Impact

The Proposed Project is outside a designated fault zone and near the Calaveras Fault. Because construction and operation of the Proposed Project would not occur on an active fault line delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, it would not directly or indirectly cause potential adverse effects associated with rupture of a known earthquake fault. Additionally, there is no substantial evidence indicating that the project components would directly or indirectly exacerbate the effects of a potential rupture. Neither the construction nor operation of the Proposed Project would reasonably increase the likelihood of an earthquake nor increase the force or magnitude of a fault rupture. Therefore, **no impact** would occur.

ii. Strong seismic ground shaking—No Impact

There is potential for a high-magnitude earthquake to occur along the regional fault lines near the project location. While the Proposed Project would be located in an area susceptible to earthquakes, the Proposed Project would not exacerbate the effects of ground shaking that may occur in the area. The Proposed Project would be used, in part, for human occupancy and would be designed in accordance with existing laws and regulations related to geological and seismic stability. Because construction and operation of the Proposed Project would neither directly nor indirectly cause nor exacerbate seismic ground shaking that may occur in the project area, **no impact** would occur.

iii-iv. Seismic-related ground failure, including liquefaction and landslides—Less than Significant

The Proposed Project is not anticipated to be constructed on soils susceptible to liquefaction. The project site and adjacent properties are relatively flat and not susceptible to landslides. During construction activities for building foundations, there is some potential for open excavation areas to fail. With proper safety procedures, required inspections, and adherence to current CBC standards, the risk of collapse caused by landslide would be less than significant.

Construction or operation of the Proposed Project would not directly or indirectly exacerbate any existing liquefaction hazards in the project vicinity. This is because the Proposed Project would not include uses that would substantially change the existing soil composition in the area, nor would the Proposed Project increase the groundwater table or otherwise increase soil saturation. Therefore, no impact would occur.

Overall, impacts related to liquefaction, ground failure, and landslides would be **less than significant**.

b. Substantial soil erosion or the loss of topsoil—Less than Significant

The Proposed Project would include ground-disturbing construction activities that could increase the risk of erosion or sediment transport. Construction of the Proposed Project would result in an area of disturbance greater than 1 acre. Therefore, the Proposed Project would be subject to the Construction General Permit (refer to Section 8.2.1). In accordance with the Construction General Permit, CAL FIRE would be required to prepare and implement a SWPPP. Among other things, the SWPPP would include a list of BMPs that would be implemented during project construction to prevent soil erosion and protect the topsoil. These BMPs would be implemented to ensure effective erosion control during construction. Exposed soils within the work area would be stabilized or landscaped following completion of construction activities. With erosion-control BMPs and SWPPP compliance, impacts related to accelerated erosion during construction would be **less than significant**.

c. Location 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 an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse—Less than Significant

Landslide. The risk of landslide is discussed above under item 3.7.3(a)(iii).

Lateral spreading. The project site is located on a relatively flat surface with silty clay soils that have low likelihood lateral spreading. Additionally, lateral spreading is activated by liquefaction, and the soils at the project site are not susceptible to liquefaction, as discussed under item 3.7.3(a)(iii). Therefore, the Proposed Project would not increase the risk of seismically induced lateral spreading or increase the exposure of people or structures to such risk.

Subsidence. The Proposed Project would not involve removal of substances below the ground, such as water or petroleum, that would result in subsidence. No surface water would be drained or removed; therefore, organic subsidence is not anticipated.

Liquefaction. The risk of liquefaction is discussed above under 3.7(a)(iii).

Collapse. The project site is composed of silty clay and alluvial deposits which result in collapsable soils.

The impact related to location on unstable geologic units or soils is **less than significant**.

d. Location on expansive soil, creating substantial direct or indirect risks to life or property—less than significant

The NRCS (2024) classifies the expansive qualities of the soil within the project site as “moderate.” Therefore, the Proposed Project is subjected to potential damage due to expansive soils. However, the Proposed Project would comply with CBC and standard engineering requirements which would require a soils report and appropriate development on those soils. Therefore, impact due to expansive soils is expected to be **less than significant**.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater—No Impact

The Proposed Project would not involve installation of facilities that would rely on septic tanks or alternative wastewater disposal systems. Therefore, the suitability of soils for the use of septic tanks or alternative wastewater systems is not relevant. There would be **no impact**.

f. Destruction of a unique paleontological resource or site or unique geological feature—Less than Significant with Mitigation

The UCMP database query showed several vertebrate fossils in San Benito County. Due to the project site being in a low-lying area, near a prehistoric lake, the site has potential to contain fossils. If project excavation were to encounter significant fossils, there is a risk that the fossils could be damaged or destroyed. This would constitute a significant impact. Implementation of **Mitigation Measure GEO-1** would require CAL FIRE or its contractors to stop construction and appropriately investigate any inadvertent paleontological discoveries. Therefore, the potential for the Proposed Project to directly or indirectly destroy a unique paleontological resource would be reduced to a **less-than-significant level with mitigation.**

Mitigation Measure GEO-1: Paleontological Resources Training and Halt Construction if Paleontological Resources Are Discovered, Evaluate Discoveries for Uniqueness, and Implement Appropriate Mitigation Measures for Unique Resources.

The State of California (DGS) and its contractors shall implement the following procedures if paleontological resources are discovered during construction activities:

- Prior to ground disturbance, the construction crew must be trained on what is a unique paleontological resource.
- Stop work immediately within 50 feet of a unique paleontological resource.
- Contact DGS immediately.
- Protect the site from further impacts, including looting, erosion, or other human or natural damage.
- A paleontological resources principal investigator who meets the standards set forth by the SVP will be retained to evaluate the discovery and make a recommendation to DGS as to whether or not it is a unique paleontological resource.
- If the resource is not a unique paleontological resource, then it will be documented appropriately, and no further measures will be required.
- If the resource is a unique paleontological resource, the principal investigator, in consultation with DGS, will recommend resource-specific measures to protect and document the paleontological resource, such as photo documentation and avoidance or collection.

- If collection is necessary, the fossil material will be properly prepared in accordance with SVP guidelines and/or curation at a recognized museum repository. Appropriate documentation will be included with all curated materials.

3.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.8.1 Regulatory Setting

The following sections describe federal and state laws, regulations, and policies that are relevant to impacts that could result from Proposed Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

The USEPA has developed federal regulations to reduce GHG emissions from motor vehicles and has developed permitting and reporting requirements for large stationary emitters of GHGs. As discussed in Section 3.3, "Air Quality," the USEPA and NHTSA set standards for passenger cars and light trucks for the CAFE standards and GHG emission standards.

State Laws, Regulations, and Policies

In recent years, California has enacted numerous policies and plans to address GHG emissions and climate change. In 2006, the California State Legislature enacted AB 32, the Global Warming Solutions Act, which set the overall goals for reducing California's GHG emissions to 1990 levels by 2020. SB 32, a follow-up to AB 32, similarly calls for a statewide GHG emissions reduction to 40 percent below 1990 levels by December 31, 2030. Subsequent executive orders and bills (AB 1279 and SB 100) have revised the overall goal to statewide carbon neutrality by 2045 and net negative emissions thereafter.

CARB has completed rulemaking to implement several GHG emission reduction regulations and continues to investigate the feasibility of implementing additional regulations. These include the low-carbon fuel standard, which reduces GHG emissions associated with fuel usage, and the Renewables Portfolio Standard, which requires electricity suppliers to increase the amount of electricity generated from renewable sources. CARB has implemented a mandatory reporting regulation and a cap-and-trade program for large emitters of GHGs.

CARB's *2022 Scoping Plan for Achieving Carbon Neutrality* lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no

later than 2045, as directed by AB 1279 (CARB 2022). Strategies include increasing building efficiency and renewable power production, using clean and renewable fuels, transitioning to zero-emission vehicles, enhancing walkable and bikeable communities with transit, cleaner freight and goods movement, reducing emissions of pollutants with high global warming potential (GWP), capping emissions from key sectors, investing in communities to reduce emissions, capturing and storing carbon through the State's natural and working lands, and a variety of mechanical approaches.

As described in Section 3.6, "Energy," the California Code of Regulations' Title 24 Building Energy Efficiency Standards are designed to ensure that new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality. Among other priorities, CALGreen includes mandatory measures to support the goals of the State's GHG reduction program and promotes healthful indoor and outdoor air quality.

The MBARD is the primary agency responsible for addressing air quality concerns in Monterey, San Benito, and Santa Cruz Counties. Its role is discussed in detail in Section 3.1, "Air Quality." MBARD has identified its preferred methods for analyzing project-related GHG emissions in CEQA analyses and recommends multiple GHG reduction measures for land use development projects. MBARD has developed a GHG threshold for stationary sources. A proposed stationary source project would not have a significant GHG impact if operation of the project would emit less than the significance level of 10,000 metric tons per year of carbon dioxide equivalents (CO_2e), or if, in accordance with CEQA Guidelines Section 15064.4(b)(3), the project would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (MBUAPCD 2016). However, MBARD has not developed a threshold for land use development projects.

3.8.2 Environmental Setting

Global climate change is already affecting ecosystems and societies throughout the world and is caused, in part, by the accumulation in the atmosphere of GHGs, which are produced primarily by the burning of fossil fuels for energy. Because GHGs (CO_2, methane, NO_2, and chlorofluorocarbons) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. Consequently, the cumulative analysis is the same as the discussion concerning Proposed Project impacts. GHG emissions are typically reported in terms of CO_2e, which converts all GHGs to an equivalent basis, considering their GWP compared to CO_2.

CARB compiles GHG inventories for the State of California. Based on CARB's 2022 GHG inventory data, California emitted 371.1 million metric tonnes of carbon dioxide equivalents (MMTCO2e), including emissions resulting from imported electrical power (CARB 2024). Between 1990 and 2022, the population and economy of California grew considerably. Despite this population and economic growth, CARB's 2022 statewide inventory indicates that California's net GHG emissions in 2022 were below 1990 levels of 431 MMTCO2e, which was the 2020 GHG reduction target codified in AB 32. The 2022 emissions data shows that the State of California is continuing its established long-term trend of reducing GHG emissions, despite an anomalous emissions trends from 2019 through 2021, which was due in large part to the impacts of the COVID-19 pandemic.

CAL FIRE currently has an existing facility at the CVH. The operations from this existing facility would be relocated to the Proposed Project site. Thus, the existing baseline includes the CAL FIRE activities that occur at the existing facility, including aircraft activity, vehicles, and fire-retardant mixing. As such, these emissions would only be considered a new environmental impact if the Proposed Project would result in an increase in the amount of activity compared to the baseline of the existing facility. Building-associated emissions that may combust fossil fuels, such as space heating, and indirect emissions from electricity use would be additional as the existing buildings would not be demolished but repurposed by the City of Hollister and the airport; therefore, the existing emissions would continue and new emissions would be introduced.

3.8.3 Discussion of Checklist Responses

a. Generate a net increase in GHG emissions that may have a significant impact on the environment—Less than Significant

The Proposed Project would generate GHG emissions during construction as a result of the combustion of fossil-fueled construction equipment, material hauling, and worker trips. Construction-related emissions were estimated using CalEEMod version 2022.1.1.26. Project construction assumptions, including equipment usage, schedule, and haul routes used for this analysis, were based on information provided in Chapter 2, *Project Description,* as well as a list of proposed equipment and equipment hours of use provided by CAL FIRE and identified in Appendix B. The total emissions for construction activities of the Proposed Project were estimated to be 628 metric tons of carbon dioxide equivalents ($MTCO_2e$) for funded construction activities and 78 $MTCO_2e$ for unfunded future construction activities. The construction emissions would be a one-time occurrence and would cease once construction of the Proposed Project is complete. Operations of the Proposed Project would increase above existing operations by 535 $MTCO_2e$ annually for funded activities and 524 $MTCO_2e$ annually for unfunded future activities, for a total operations increase (assuming full buildout) of 1,059 $MTCO_2e$.

MBARD's industrial threshold is 10,000 $MTCO_2e$ per year, which could be considered an appropriate standard for this facility since it would have permitted emission sources. Therefore, the increase in GHG emissions over the life of the project would be less than the industrial threshold and, therefore, would not impede the progress of California GHG emission reduction goals outlined in SB 32 and AB 1279. The impact would be **less than significant.**

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

The Proposed Project would comply with both local and statewide GHG emission reduction plans and regulations. California implemented AB 32 to lower GHG emissions to 1990 levels by 2020. Additionally, SB 32 outlined an overall goal to reduce California's GHG emissions to 40 percent below 1990 levels by 2030, and AB 1279 and SB 100 have revised the goal to statewide carbon neutrality by 2045. The Proposed Project would not hinder achievement of the State's goals because GHG emissions would be less than the industrial source threshold established by MBARD. The GHG emissions from construction equipment use are one-time emissions and

would cease once construction of the Proposed Project is complete. The operational GHG emissions would be similar to existing conditions with only minor increases. The Proposed Project would not impede the progress of any of California's or Monterey County's GHG plans, policies, or regulations and this impact is **less than significant**.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. Be 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 and 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?	☐	☒	☐	☐

3.9.1 Regulatory Setting

Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for

workers and the public. The major federal, state, and regional agencies enforcing these regulations are the USEPA, Occupational Safety and Health Administration (OSHA), California Department of Toxic Substances Control (DTSC), California Occupational Safety and Health Administration (Cal/OSHA), California Governor's Office of Emergency Services (Cal OES), SWRCB, Central Valley RWQCB, and the Monterey Bay Air Resources District (MBARD).

Federal Laws, Regulations, and Policies

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 et seq.) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amended some provisions of CERCLA and provides for a community right-to-know program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 et seq.), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

The USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all of RCRA's provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Occupational Safety and Health Administration

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

14 CFR Part 139: Certification of Airports

Certification of Airports (14 CFR Part 139) requires the Federal Aviation Administration (FAA) to issue Airport Operating Certificates to airports serving scheduled passenger-carrying operations of air carriers with more than 9 seats and unscheduled passenger-carrying operations with at least 31 seats. Airports must comply with safety and emergency response requirements,

including runway safety, aircraft rescue and firefighting, aviation fueling safety, snow and ice control, and wildlife hazard management.

14 CFR Part 150: Airport Noise Compatibility Planning

The purpose of 14 CFR Part 150 is to establish procedures for airport noise compatibility planning. Airports are required to develop and submit noise exposure maps and noise compatibility programs. These programs should identify non-compatible land uses and propose measures to reduce and prevent new non-compatible land uses around the airport. This regulation applies to airports aiming to manage and mitigate noise impacts on surrounding communities through comprehensive planning and stakeholder engagement.

14 CFR Part 161: Notice and Approval of Airport Noise and Access Restrictions

14 CFR Part 161 provides a framework for airports to implement noise and access restrictions in compliance with the Airport Noise and Capacity Act of 1990. Airports must follow specific notice, review, and approval procedures for any proposed noise or access restrictions on aircraft operations. This includes public notice, detailed analysis of the restrictions' impacts, and seeking approval from the FAA. This regulation ensures that any noise or access restrictions are transparent, justified, and consider the impacts on all stakeholders, including operators and the surrounding community.

Federal Air Administration Safety Management Systems

The FAA's Safety Management System (SMS) framework is a formal, top-down, organization-wide approach to managing safety risk and ensuring the effectiveness of safety risk controls. SMS includes systematic procedures, practices, and policies for managing safety risk and is designed to proactively identify hazards and manage safety risk. The framework is composed of four functional components: Safety Policy, Safety Risk Management, Safety Assurance, and Safety Promotion. By incorporating SMS, aviation organizations can better develop and implement mitigations appropriate to their specific environment and operations, ensuring compliance with international safety standards.

Aircraft Rescue and Fire Fighting Requirements

Aircraft Rescue and Fire Fighting (ARFF) requirements ensure that airports have appropriate firefighting and rescue capabilities to handle emergencies involving aircraft. These requirements are part of the FAA's safety standards and apply to airports with scheduled passenger operations. ARFF services include emergency response, mitigation, evacuation, and rescue of passengers and crew in the event of an aviation accident or incident. Airports must maintain specialized firefighting equipment, provide advanced training for personnel, and develop emergency response plans to effectively manage such incidents.

State Laws, Regulations, and Policies

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety

equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans. Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material safety data sheets available to employees and document employee information and training programs.

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance(s) are required to develop a risk management plan (RMP). Certified Unified Program Agencies (CUPAs) implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

Hazardous Waste Control Law

The Hazardous Waste Control Law (California Health and Safety Code Chapter 6.5, Section 25100 et seq.) authorizes the California Environmental Protection Agency (CalEPA) and DTSC to regulate the generation, transport, treatment, storage, and disposal of hazardous wastes. DTSC can also delegate enforcement responsibilities to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazard Waste Control Law.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other State agencies set the standards for their programs while local governments implement the standards. These local implementing agencies are called CUPAs. For each county, the CUPA regulates/oversees the following (not all of which are applicable to the Proposed Project):

- Hazardous materials business plans;
- CalARP plans or federal RMPs;
- The operation of underground storage tanks and aboveground storage tanks;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

California Fire Code

The California Fire Code (24 CCR Part 9) establishes minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of the code contains requirements for fire safety during construction and demolition activities, such as development of a pre-fire plan in coordination with the fire chief; maintaining vehicle access for firefighting at construction sites, and requirements related to safe operation of internal combustion engine construction equipment.

Specifically, the California Fire Code requires that smoking only be conducted in approved areas (Section 3304.1); materials susceptible to spontaneous ignition, such as oily rags, be stored in a listed disposal container (Section 3304.2.4); sources of ignition and smoking be prohibited in flammable and combustible liquid storage areas (Section 3305.4); and that structures under construction be provided with not less than one approved portable fire extinguisher, including one in every storage and construction shed and additional portable fire extinguishers where special hazards exist including where flammable and combustible liquids are stored and used (Section 3315.1), among other requirements. Chapter 35 of the California Fire Code governs welding and other hot work and imposes numerous safety requirements to minimize the risk of fire ignition from these activities.

CAL FIRE Wildland Fire Management

The Office of the State Fire Marshal and CAL FIRE administer State policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire-suppression equipment (Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines must not be used within 25 feet of any flammable materials (Section 4431).

Porter-Cologne Water Quality Control Act

As discussed in more detail in Section 3.10, "*Hydrology and Water Quality*", the Porter-Cologne Act (California Water Code, Division 7) is the provision of the California Water Code that regulates water quality in California and authorizes the SWRCB and RWQCBs to implement and enforce the regulations.

RWQCBs regulate discharges under the Porter-Cologne Act primarily through the issuance of WDRs. Anyone discharging or proposing to discharge materials that could affect water quality must file a report of waste discharge. The SWRCB and applicable RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Proposed Project site is under the jurisdiction of the Central Valley RWQCB.

California Public Utilities Code Article 3.5 (State Aeronautics Act)

California Public Utilities Code Article 3.5 (State Aeronautics Act) focuses on the orderly development of public-use airports and the areas surrounding them. The purpose is to promote the overall goals and objectives of California airport noise standards and to prevent the creation of new noise and safety problems. The article mandates the establishment of airport land use commissions (ALUCs) in every county with an airport. These commissions are responsible for ensuring that land use measures around airports minimize public exposure to excessive noise and safety hazards.

California Public Utilities Code Section 21670 et seq.

California Public Utilities Code Section 21670 et seq. establishes the framework for ALUCs in counties with public-use airports. The purpose is to ensure orderly development around airports and minimize public exposure to excessive noise and safety hazards. ALUCs are responsible for creating airport land use compatibility plans (ALUCPs) that define compatible land uses within the airport influence area (AIA) to protect public health, safety, and welfare.

California Government Code Section 65302.3 et seq.

California Government Code Section 65302.3 et seq. outlines the responsibilities of local agencies in land use planning. It requires that the general plan, and any applicable specific plan, be consistent with the ALUCPs adopted or amended pursuant to Section 21675 of the Public Utilities Code. This ensures that local land use planning is aligned with airport safety and noise standards, preventing incompatible land uses around airports.

Local Laws, Regulations, and Policies

Hollister Municipal Airport Land Use Compatibility Plan

The Hollister ALUCP was adopted by the Council of San Benito County acting as the ALUC in 2012 (San Benito County 2012). The ALUCP guides and manages land use around Hollister Municipal Airport to ensure safety, minimize conflicts between airport operations and surrounding development, and promote compatible land uses that support the airport's continued operation.

Additional relevant local laws, regulations, and policies pertaining to hazards and hazardous materials for the proposed project can be found in Appendix A.

3.9.2 Environmental Setting

Hazardous Materials Sites

According to the Envirostor and Geotracker databases, there is one active hazardous materials cleanup site within 5,000 feet of the Proposed Project site (DTSC 2024; SWRCB 2024). The cleanup program site is listed for the potential presence of nitrates at 1901 Shelton Drive, approximately 2 miles east of the Proposed Project's location that has been open for verification monitoring since 2018 (SWRCB 2024). The project area is not located on a site listed pursuant to Government Code Section 65962.5 (also known as the Cortese List), and which is generally represented by the EnviroStor.

Valley Fever

Valley Fever is a fungal-borne respiratory infection endemic to the soil within the southwestern portion of the United States, including San Benito County which is in between the Central Valley and Central Coast of California. Valley Fever is caused by the fungus *Coccidioides immitis*, which grows in soils in areas of low rainfall, high summer temperatures, and moderate winter temperatures. It poses a risk to humans when the soil is disturbed by ground-disturbing activities, such as digging, driving, and high winds. Populations with more than 20 cases annually of Valley Fever per 100,000 people are considered highly endemic (Department of Industrial Relations 2023). According to the California Department of Public Health (CDPH), San Benito County has had six provisional cases (either suspected or confirmed) as of October 31, 2024 (CDPH 2024). While this number is not high enough to be considered endemic, it is important to note that cases have gone up in recent years, from four confirmed cases in 2023, and two in 2022, and it is likely that the number of overall cases will continue to rise (CDPH 2024).

Airports

As stated in Section 3.9.1, "Regulatory Setting," the ALUCP guides and manages land use around Hollister Municipal Airport to ensure safety, minimize conflicts between airport operations and surrounding development, and promote compatible land uses that support the airport's continued operation. The entire Project site is located within the Hollister Municipal Airport and falls within the ALUC Review Area[1], similarly to the existing location of the CAL FIRE Air Attack Base. According to the ALUCP, the existing location of the Air Attack Base falls within Safety Zone 3[2], which has a moderate relative risk level, and the Proposed Project site is located within

[1] ALUC Review Area 1 encompasses locations where all four factors (noise, safety, airspace protections, and overflight) represent compatibility concerns.

[2] Safety Zone 3 is Fan-shaped area adjacent to Zone 2 and extends 2,000 feet minimum and 4,000 feet maximum from the ends of the runway.

Safety Zones 5[3] and 6[4] (Sideline Zone and Traffic Pattern Zone, respectively), which have a low to moderate and low overall relative risk level (San Benito County 2012). In general, safety zones help ensure that land uses around airports are compatible with aviation safety and operations, reducing the potential for accidents or conflicts between aircraft and people or structures on the ground. Additionally, the project area falls within the Critical Airspace Protection Zone[5] which is designated to protect airspace from land uses or activities that might interfere with aircraft flight paths, approach and departure routes, or air traffic control operations.

Wildfire Hazards

The Project site is located within the Hollister Municipal Airport and is not within the state responsibility area (SRA). The closest SRA to the project site is located approximately 1.4 miles west and has the designation for moderate fire hazard severity zones (FHSZs) (CAL FIRE 2024). As discussed in greater detail in Section 3.15, "Public Services," the project site is served by the Hollister Fire Department out of Fire Station 3, which is located on the same property as the project site. Wildfire hazards are discussed in more detail in Section 3.20, "Wildfire."

Sensitive Receptors

Sensitive receptors include facilities such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants. The nearest such facilities to the project site are San Benito County Behavioral Health, a County-operated mental health and substance use treatment facility located approximately 2.2 miles southeast of the project site. The nearest schools are Bayani Lui Preschool and Meadowlark Preschool, located 2.2 miles south and 2.6 miles to the southeast, respectively. The nearest hospital is the Mabie First Street Health Care Center, located approximately 2.6 miles south of the project site. Furthermore, there is a Motor Squad Training Institute located approximately 0.28 miles east of the project site that facilitates civilian and police motorcycle courses.

Proposed Flame Retardant

The Proposed Project would involve the flame-retardant PHOS-CHEK during both the construction and operational phases for construction of the fire retardant mixing station and the retardant loading of the fixed wing aircraft. According to the safety data sheet provided for PHOS-CHEK, it does not meet the criteria for classification under the Globally Harmonized System, meaning it does not pose significant health, physical, or environmental hazards that

[3] Safety Zone 5 is known as a Sideline Zone and is typically adjacent to the runway, a minimum and 500 feet and, a maximum of 1,000 from the runway centerline.

[4] Safety Zone 6 is known as a Traffic Pattern Zone and is typically an oval area around other zones that is 5,000 feet minimum to 10,000 feet maximum beyond where the runway ends, and 4,500 feet minimum to 6,000 feet maximum from the runway centerline.

[5] The Critical Airspace Protection Zone encompasses the primary surface and the critical portions of the approach and transitional surfaces to where these surfaces intersect with the horizontal surface.

would require special handling, labeling, or safety measures according to GHS standards (Perimeter Solutions 2015). Furthermore, PHOS-CHEK is not considered to be a hazardous waste as defined by RCRA, 40 CFR 261 (Perimeter Solutions 2015).

3.9.3 Discussion of Checklist Responses

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials—Less than Significant with Mitigation

Construction

As described in Chapter 2, *Project Description,* the Proposed Project would involve constructing new buildings, including a 32-bedroom dormitory, operations building, apparatus and warehouse building, hangars, helicopter training tower, covered garbage enclosure and a fire retardant mixing station. It would also include paving a taxiway, installing fire-retardant pads, trenching for utilities, underground storm-drain tanks, helipads, parking areas, and fencing. Furthermore, there are future plans to construct an emergency generator building, fire pump, automobile shop, storage building, covered fire pump test pit, water tower, vehicle fueling station, gym building, communications equipment building, photovoltaic panels, and office building. Site work would include grading and compacting the soil; paving; cutting trenches, installing underground utilities such as water, sewer systems and gas lines; fencing; paving; landscaping; associated utilities and appurtenances; and taxiway connection. Accordingly, project construction would require the transfer, use, storage, or disposal of hazardous materials (e.g., fuel, oil, and lubricants) used during typical construction activities.

The project would adhere to all relevant federal and state regulations concerning the transport, use, storage, or disposal of hazardous materials during construction. All materials designated for disposal would be evaluated according to federal and state hazardous waste criteria. Despite these precautions, there is a possibility that small amounts of hazardous materials could be accidentally released during equipment transport and use, potentially causing adverse effects on the public or the environment. Best management practices (BMPs) incorporated into the project (see Table 2-3 in Chapter 2, *Project Description*) would provide additional safeguards against these potential impacts. BMP-4 (On-site Hazardous Materials Management) would require that the worksite manager maintain an inventory of hazardous materials, ensure proper labeling, disposal, and storage to prevent chemical exposure, and keep contaminants away from soil and water. Furthermore, it would ensure that hazardous materials are removed and disposed of according to a spill prevention and response plan. BMP-5 (Spill Prevention and Response Plan) would require the creation of a spill prevention and response plan identifying personnel training, spill cleanup equipment, and proper disposal. BMP-5 (Spill Prevention and Response Plan) would also ensure small spills are absorbed or excavated, materials are disposed of properly, and spill response kits are available, with regular inspections for compliance. BMP-6 (Vehicle and Equipment Maintenance) would require that incoming equipment be checked for leaking oils and fluids.

Even with implementation of the BMPs described above, the potential remains that small amounts of hazardous materials could be accidentally released during equipment transport and use, potentially causing adverse effects on the public or the environment. The implementation

of **Mitigation Measure HAZ-1 (Hazardous Materials Spill Prevention and Containment)** would require incorporating relevant BMPs into project plans, including secondary containment, safe handling procedures, and designated areas for refueling and equipment maintenance. In case of a spill, the contractor would need to notify the State immediately, and hazardous substances would be managed per Title 22 of the CCR. This measure would reduce potential hazardous material impacts to less-than-significant levels.

Any spoils or other on-site soils that may become contaminated by products used by heavy construction equipment (e.g., from a hydraulic fluid leak) would be hauled off site for disposal at a permitted landfill. As a result of compliance with the applicable regulations described above, no substantial risks would result to construction workers, the public, or the environment from the construction-related transport, use, storage, or disposal of hazardous materials.

During construction, the project could disturb soil and cause the fungal spores to become airborne, potentially putting construction personnel and wildlife at risk of contracting Valley Fever. Dust control mitigation measures and requirements imposed by state and federal Occupational Safety and Health Administrations (OSHA and Cal/OSHA) would reduce effects of Valley Fever. As an example, when exposure to dust is unavoidable, CAL FIRE would be required to develop and implement a respiratory protection program in accordance with Cal/OSHA's respiratory protection standard (8 CCR 5144) and contractors would have to provide National Institute for Occupational Safety and Health-approved respiratory protection with particulate filters rated as N95, N99, N100, P100, or high-efficiency particulate air (HEPA). Mitigation Measure AQ-1 requires preparation and implementation of a Valley Fever Management Plan in Consultation with CDPH and Monterey County Department of Public Health. With implementation of Mitigation Measure AQ-1, the impact to construction workers and adjacent residents would be less than significant with mitigation.

Thus, with the implementation of Mitigation Measures HAZ-1 and AQ-1 and BMPs 4, 5, and 6, this impact would be **less than significant with mitigation**.

Mitigation Measure HAZ-1: Hazardous Materials Spill Prevention and Containment.

The following measures shall be implemented prior to and during construction and shall be incorporated into project plans and specifications:

- BMPs for spill prevention shall be incorporated into project plans and specifications and shall contain measures for secondary containment and safe handling procedures.
- Project plans and specifications shall identify construction staging areas and designated areas where equipment refueling, lubrication, and maintenance may occur. Areas designated for refueling, lubrication, and maintenance of equipment shall be approved by the State.
- In the event of any spill or release of any chemical or wastewater during construction, the contractor shall immediately notify the State.
- Hazardous substances shall be handled in accordance with Title 22 of the California Code of Regulations, which prescribes measures to appropriately manage hazardous substances, including requirements for storage, spill prevention and response and reporting procedures.

Operations

Operations for the Proposed Project would remain largely the same as current operational practices and would include refueling, retardant loading of fixed wing aircraft, and flight operations for the Firehawk helicopter. New operational activities would include housing staff in a 32-bed barracks and staff use of canopies and hangars for helicopters and fixed-wing aircraft, a helipad, an Air Operations building with a communications tower, and a site-wide emergency generator for 24/7 operations, including night activities. Operations and maintenance would require the use of hazardous materials such as the use of fuel to power aircrafts, as well as an incremental increase in the amount of retardant used. However, as stated above, the proposed flame-retardant PHOS-CHEK is not known to pose significant health, physical, or environmental hazards that would require special handling, labeling, or safety measures. All hazardous materials used during operation and maintenance would comply with existing federal and state regulations and would not create a significant hazard to the public or the environment. Therefore, the Proposed Project would have a **less-than-significant** impact during the operation phase.

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—Less than Significant with Mitigation

As discussed in item 3.9.3(a), Proposed Project construction would require the use and presence of certain hazardous materials, such as fuels and oils. These materials would be contained in construction equipment and/or could be stored on site. Spills of these hazardous materials could result in a significant hazard to the public or environment if handled improperly and released through upset or accident conditions. As detailed above, the Proposed Project's use of hazardous materials would comply with all applicable laws and regulations; and BMPs 4, 5, 6 and Mitigation Measure HAZ-1 would also be implemented. Given implementation of these measures, Proposed Project construction would not create a substantial hazard to the public or the environment from reasonably foreseeable upset or accident conditions involving the use of hazardous materials.

As stated above, the nearest hazardous materials cleanup site is approximately 2 miles from the project site; thus, it is not expected that the Proposed Project would release hazardous materials through disturbance of contaminated soils during construction.

As discussed in item 3.9.3(a), Proposed Project operation and maintenance activities would remain similar to those currently in use and would use a minor amount of hazardous materials (e.g., fuel, oil) associated with refueling, retardant loading of fixed wing aircraft, and flight operations for the Firehawk helicopter. The use of these hazardous materials would comply with all applicable laws and regulations and would not create a significant hazard to the public or environment. Overall, this impact would be **less than significant with mitigation.**

c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school—No Impact

As outlined in Section 3.9.2, the Motor Squad Training Institute, a motorcycle training facility for police and civilians, is located 0.28 miles east of the project site. Additionally, the nearest schools for children are located within 2 miles of the project site. No schools are located within 0.25 miles of the project site; therefore, this impact is expected to be **less than significant**. Furthermore, the implementation of HAZ-1 would further decrease the possibility of impacts due to the handling, storage, and emissions of hazardous materials.

d. Located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, create a significant hazard to the public or the environment—No Impact

The Proposed Project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the Proposed Project would not create a significant hazard to the public or the environment. There would be **no impact**.

e. Located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a private airport or public airport and result in a safety hazard or excessive noise for people residing or working in the study area—No Impact

The Proposed Project is situated within the Hollister Municipal Airport, placing it within the ALUC Review Area (San Benito County 2012). A detailed discussion on the noise-related impacts of the project, due to its location within the Hollister Municipal Airport ALUC Review Area, can be found in Section 3.13, “Noise,” of this IS/MND. The following section focuses on whether the Proposed Project would create a safety hazard for individuals working or living in the project area, specifically regarding safety and airspace protection, as discussed in the Hollister Municipal ALUCP.

As stated previously, the Proposed Project site is located within Safety Zones 5 and 6, according to the Hollister Municipal ALUCP. These zones are designated as sideline and traffic pattern zones, respectively. In comparison, the existing CAL FIRE Air Attack Base is situated in Safety Zone 3, known as the inner turning zone (San Benito County 2012). The ALUCP outlines various land use categories and their acceptability based on the safety zone in which the proposed land use is located. The ALUCP permits the construction of public facilities, such as police and fire stations, within Safety Zone 5 if they serve the airport (San Benito County 2012). Since the Proposed Project would engage in airport-related activities, it would be considered airport-serving. Consequently, there would be no conflict with the safety zone designations, and the Proposed Project would not create a safety hazard for people working or residing in the area. Additionally, the ALUCP notes that Safety Zones 5 and 6 are generally considered to carry less risk than Zone 3, indicating that the Proposed Project would be subject to a lower safety risk in terms of airport land use compatibility than the existing CAL FIRE Air Attack Base.

The Proposed Project site would also share the same designation for airspace protection as the current CAL FIRE Air Attack Base since both locations are within the Critical Airspace Protection Zone. As a result, there would be no additional risk or incremental change to airspace protection requirements associated with the construction or operation of the Proposed Project. While the project proposes an expansion of facilities, the purpose and use would remain nearly identical to the existing operation. For these reasons, the Proposed Project would have a **less than significant** impact with regards to creating a safety hazard for people residing or working in the study area.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan—Less than Significant with Mitigation

The site for the Proposed Project is within the Hollister Municipal Airport, bordered to the north and east by the CVH runway. The main access to the site is from the nearby Aerostar Way, though this entry point is restricted to the public by a chain-link fence. During construction, traffic from vehicles entering and leaving the airport could temporarily cause delays or impact access to the airport and nearby public roads. However, as discussed in Section 3.17, "Transportation," implementation of Mitigation Measure TR-1 shall require that contractors prepare and implement a construction traffic management plan to manage traffic flow during construction. This would manage traffic to ensure adequate emergency responder access, by methods such as signage, and coordinating construction activities to ensure that one travel lane remains open at all times, unless flaggers or temporary traffic controls are in place, to provide emergency access. Because the Proposed Project's construction activities are temporary and the new Air Attack Base facilities are designed to enhance emergency response capabilities, the Proposed Project is not anticipated to have lasting effects on emergency response or evacuation plans. As a result, this impact is considered **less than significant with mitigation**.

g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires—Less than Significant with Mitigation

Construction activities utilizing internal combustion engine equipment would have potential to provide a spark and inadvertently ignite a wildfire, which could expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Activities associated with the Proposed Project would include clearing and grubbing the site prior to construction, which would reduce the potential for accidental wildfire ignition by removing flammable vegetation. The project site is within the existing service area for the Hollister Fire Department, which is located on the same property as the Proposed Project.

As discussed in Section 3.20, "Wildfire," implementation of Mitigation Measure WF-1 would require the inclusion of spark arrestors and additional fire suppression precautions during the high fire danger period. Furthermore, project construction activities would comply with applicable Public Resource Code requirements related to wildland fire safety, which would reduce the risk of accidental wildfire ignition. Overall, the Proposed Project would not significantly exacerbate wildfire risks or hazards. Therefore, the impact would be **less than significant with mitigation.**

3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Proposed Project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. 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:				
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. 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; or	☐	☒	☐	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

3.10.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Clean Water Act

The CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. Key sections of the CWA pertaining to water quality regulation that are potentially relevant for the Proposed Project are Sections 303, 401, and 402. For discussion of Section 404 of the CWA, please refer to Section 3.4, "Biological Resources".

Section 303(d) – Listing of Impaired Water Bodies

Under CWA Section 303(d), states are required to identify "impaired water bodies" (i.e., those not meeting established water quality standards); identify the pollutants causing the impairment; establish priority rankings for waters on the list; and develop a schedule for the development of control plans to improve water quality. USEPA then approves the state's recommended list of impaired waters or adds and/or removes waterbodies.

Section 401 – Water Quality Certification

Under CWA Section 401, a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the U.S. unless a Section 401 WQC is issued or certification is waived (USEPA 2024). States and authorized tribes where the discharge would originate are generally responsible for issuing WQCs. One of the major federal permits subject to Section 401 is the CWA Section 404 permit issued by the USACE (refer to discussion in Section 3.4, "Biological Resources").

In issuing WQCs, certifying authorities consider whether the federally licensed or permitted activity will comply with applicable water quality standards, effluent limitations, new source performance standards, toxic pollutants restrictions, and other appropriate water quality requirements of state or tribal law (USEPA 2024).

Section 402 – National Pollutant Discharge Elimination System Permits for Stormwater Discharge

CWA Section 402 regulates stormwater discharges to surface waters through the NPDES, which is officially administered by USEPA. In California, USEPA has delegated its authority to the SWRCB, which, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in reference to the Porter-Cologne Act.

The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits. One of the common general permits that comes into play for construction activities is SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2022-0057-DWQ) ("Construction General Permit"). This permit applies to most construction projects that disturb 1 or more acre(s) of land and requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a SWPPP. Since the Proposed Project would disturb more than 1 acre of land, it would be subject to the Construction General Permit.

Among other things, the SWPPP would include a list of BMPs that would be implemented during project construction to prevent soil erosion, control fugitive dust, and protect the topsoil. These BMPs would be implemented to ensure effective erosion control during construction. BMPs identified in the SWPPP may include the following:

- Minimize the area of soil disturbed.
- Use water, appropriate soil stabilizers, and/or re-vegetation to reduce airborne dust.
- Stabilize all spoils piles by tarping or other methods.
- Suspend work during heavy winds.

Another type of general NPDES permit is issued under the SWRCB's Municipal Stormwater Permitting Program, which regulates discharges from municipal separate storm sewer systems (MS4s) (SWRCB 2024a). Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for municipalities with over 100,000 people and are often issued to a group of co-permittees within a metropolitan area. Phase II MS4 permits are issued for municipalities with less than 100,000 people. The City of Hollister has enrolled under the Phase II Small MS4 Permit (Order WQ-2013-0001), which specifies discharge prohibitions, effluent limitations, and receiving water limitations, among other requirements for controlling MS4 pollutant discharges.

State Laws, Regulations, and Policies

Porter–Cologne Water Quality Control Act

The Porter–Cologne Act, passed in 1969, dovetails with CWA (see discussion of the CWA above). It established the SWRCB and divided the state into nine regions, each overseen by an RWQCB. The SWRCB is the primary State agency responsible for protecting the quality of the state's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives (WQOs) for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). WQOs reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that WQOs are met. Under the Porter–Cologne Act, basin plans must be updated every 3 years.

Water Quality Control Plan for the Central Coastal Basin

The Central Coast RWQCB (Region 3) has developed a basin plan for the region, which includes the project site. The Central Coast Basin Plan (2019)[6] identifies beneficial uses for surface and groundwater bodies within the basin and specifies WQOs to protect and maintain the beneficial uses. Surface water body beneficial uses pertaining to the Proposed Project are provided in **Table 3.10-1**. To implement the beneficial uses, the Basin Plan specifies surface water WQOs for a wide range of constituents/pollutants. Of most relevance to the Proposed Project and its potential effects are the following:

- **Oil and Grease.** Waters shall not contain oils, greases, waxes, or other similar materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.
- **Sediment.** The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
- **Settleable Material.** Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
- **Turbidity.** Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits:
  - Where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases shall not exceed 20 percent.
  - Where natural turbidity is between 50 and 100 NTU, increases shall not exceed 10 NTU.
  - Where natural turbidity is greater than 100 NTU, increases shall not exceed 10 percent.

  Allowable zones of dilution within which higher concentrations will be tolerated will be defined for each discharge in discharge permits.

With respect to groundwater, the project site is located within the Gilroy-Hollister Valley Groundwater Basin, Hollister Area Subbasin (3-3.03), which has been consolidated into the larger North San Benito Subbasin (3-003.05). The Central Coast Basin Plan (2019) states that all groundwater within the Central Coastal Basin (except for that found in the Carrizo Plain groundwater basin) is suitable for agricultural water supply, municipal and domestic water supply, and industrial use.

[6] The Central Coast RWQCB has prepared an updated 2024 version of its Basin Plan; however, this version has not been fully approved as of this writing. Therefore, the 2019 version is referenced in this IS/MND.

Table 3.10-1. Beneficial Uses of Surface Waterbodies Potentially Affected by the Proposed Project

Stream	Beneficial Uses																				
	MUN	AGR	PROC	IND	GWR	REC-1	REC-2	WILD	COLD	WARM	MIGR	SPWN	BIOL	RARE	EST	FRSH	NAV	POW	COMM	AQUA	SAL	SHELL
Tequisquita Slough					X	X	X	X		X		X							X			
San Felipe Lake	X	X			X	X	X	X	X	X	X					X	X		X			
San Benito River	X	X		X	X	X	X	X		X		X				X			X			
Pajaro River	X	X		X	X	X	X	X	X	X	X	X				X			X			
Pajaro River Estuary						X	X	X	X	X	X	X	X	X	X				X			X

Notes:

Beneficial Uses Definitions (refer to the Basin Plan for full text):

Municipal and Domestic Supply (MUN) – Uses of water for community, military, or individual water supply systems, including, but not limited to, drinking water supply.

Agricultural Supply (AGR) – Uses of water for farming, horticulture, or ranching, including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

Industrial Process Supply (PROC) – Uses of water for industrial activities that depend primarily on water quality (e.g., waters used for manufacturing, food processing, etc.).

Industrial Service Supply (IND) – Uses of water for industrial activities that do not depend primarily on water quality, including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.

Ground Water Recharge (GWR) – Uses of water for natural or artificial recharge of ground water for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.

Water Contact Recreation (REC-1) – Uses of water for recreation activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.

Non-Contact Water Recreation (REC-2) – Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

Wildlife Habitat (WILD) – Uses of water that support terrestrial ecosystems, including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

Cold Freshwater Habitat (COLD) – Uses of water that support cold water ecosystems, including, but not limited to, preservation and enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

Warm Freshwater Habitat (WARM) – Uses of water that support warm water ecosystems, including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

Migration of Aquatic Organisms (MIGR) – Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.

Spawning, Reproduction, and/or Early Development (SPWN) – Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

Preservation of Biological Habitats of Special Significance (BIOL) – Uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance (ASBS), where the preservation or enhancement of natural resources requires special protection.

Rare, Threatened, or Endangered Species (RARE) – Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

Estuarine Habitat (EST) – Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

Freshwater Replenishment (FRSH) – Uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity) which includes a waterbody that supplies water to a different type of waterbody, such as, streams that supply reservoirs and lakes, or estuaries, or reservoirs and lakes that supply streams.

Navigation (NAV) – Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.

Hydropower Generation (POW) – Uses of water for hydropower generation.

Commercial and Sport Fishing (COMM) – Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

Aquaculture (AQUA) – Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.

Inland Saline Water Habitat (SAL) – Uses of water that support inland saline water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates.

Shellfish Harvesting (SHELL) – Uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sport purposes.

Source: Central Coast RWQCB 2019

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) became law in 2015 and created a legal and policy framework to locally manage groundwater sustainably. SGMA allows local agencies to customize groundwater sustainability plans (GSPs) to their regional economic and environmental conditions and needs, and establish new governance structures, known as Groundwater Sustainability Agencies (GSAs). GSPs are intended to facilitate the use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results (e.g., chronic lowering of groundwater levels). Based on the State's Basin Prioritization process, SGMA requires medium and high priority basins to develop GSAs and GSPs and manage groundwater for long-term sustainability (California Department of Water Resources [DWR] 2024a).

As noted above, the project site overlies the Gilroy-Hollister Valley Groundwater Basin, Hollister Area Subbasin (3-3.03), which has been consolidated into the North San Benito Subbasin (3-003.05) and designated as medium priority by DWR (DWR 2024b).

Local Laws, Regulations, and Policies

Local laws, regulations, and policies are listed in Appendix A.

3.10.2Environmental Setting

Topography and Climate

Elevations in the project area is around 230 feet above mean sea level (MSL). Generally, the city of Hollister is located within a valley that extends southward from San Jose, Morgan Hill, and Gilroy. The project area has a Mediterranean climate characterized by cool, wet winters and hot, dry summers. Average temperatures range from a winter low of 36 degrees Fahrenheit (°F) in December/January to a high of roughly 81°F from August to September (Western Regional Climate Center [WRCC] 2024). Mean annual precipitation is approximately 13.11 inches, with most precipitation occurring from November through April (WRCC 2024).

Surface Water Hydrology and Quality

The project site is located within the Central Coast Hydrologic Region, as overseen by the Central Coast RWQCB. This region encompasses 11,274 square miles and has 2,360 miles of streams (Central Coast RWQCB 2019). Within the Central Coast Hydrologic Region, the project site is located in the northeastern portion. The project site is located within the existing Hollister Municipal Airport, with the nearest surface water bodies being Santa Ana Creek (tributary to Tesquiquita Slough) approximately 0.75 mile to the east, and the San Benito River approximately 2.7 miles to the southwest. As noted, Santa Ana Creek flows to Tesquiquita Slough, which then ultimately flows to San Felipe Lake. The San Benito River flows to the Pajaro River, which then ultimately discharges into the Pacific Ocean.

While Santa Ana Creek is a small waterbody that is not listed in planning documents, Tesquiquita Slough, San Benito River, and Pajaro River are all listed as impaired for multiple pollutants in the CWA, Section 303(d) list (SWRCB 2024b).

Stormwater

As described in Chapter 2, *Project Description,* the project site is located within the existing Hollister Municipal Airport. The airport property generally drains north and northwest (City of Hollister 2011). The project site itself is a relatively flat, undeveloped area characterized by ruderal vegetation or grass. It can be assumed that precipitation falling on the site may infiltrate to the soil and groundwater or sheet flow off site to nearby paved areas (e.g., runways and taxiways).

Groundwater Levels, Flows, and Quality

The project site is located within the Gilroy-Hollister Valley Groundwater Basin, Hollister Area Subbasin (3-3.03) (now part of the larger North San Benito Subbasin) and designated as medium priority pursuant to SGMA (DWR 2024b). This subbasin is bounded on the north and east by the Diablo Range, while the Calaveras fault forms the western boundary and abuts the Bolsa Area subbasin (DWR 2004). Groundwater occurs in the alluvium of Holocene age, older alluvium. Most recharge to the subbasin is derived from rainfall and streamflow from creeks entering the basin (DWR 2004). In general, groundwater levels throughout most of the subbasin have shown declines from the early 20th century. However, from 1945 when annual water level measurements began, hydrographs show pronounced periodic recovery and decline trends that correlate with volume and time of streamflow (DWR 2004).

Groundwater quality in the larger basin is marginally acceptable for potable and irrigation use (DWR 2004). The water quality constituents of greatest concern are salinity, nitrate, boron, hardness, and trace elements that occasionally exceed drinking water standards (DWR 2004).

Floodplains, Dam Inundation Areas, Tsunamis, and Seiches

As noted above, the project site is not located in immediate proximity to any large rivers or streams, with the nearest waterbodies being Santa Ana Creek (0.75 mile east) and the San Benito River (2.7 miles southwest). As such, the project site is not within any mapped flood hazard zones, as identified by the Federal Emergency Management Agency (FEMA) (2024). Nevertheless, in general, the city of Hollister and its surrounding areas have historically been subject to flooding (City of Hollister 2005).

Due to its distance from the coast (approximately 21.5 miles), the city of Hollister is not subject to tsunami hazards. Additionally, no large, enclosed bodies of water exist in close proximity to the project site, which could pose a seiche wave risk.

3.10.3 Discussion of Checklist Responses

a. Violate any water quality standards, waste discharge requirements or otherwise substantially degrade water quality—Less than Significant with Mitigation

Construction

Construction of the Proposed Project would involve ground disturbance associated with site preparation, grading, and earth movement/trenching for construction and installation of the

proposed facilities. These activities would loosen soils and could result in erosion and sedimentation if precautions are not taken. On-site soils loosened during the ground-disturbing activities could be carried off site during rainstorms or by wind, potentially reaching either Santa Ana Creek or (less likely) the San Benito River, where the sediments could then be carried downstream to Tesquiquita Slough, San Felipe Lake, and/or the Pajaro River. As noted above, Tesquiquita Slough, the Pajaro River, and the San Benito River are all listed as impaired, including for turbidity/sedimentation (SWRCB 2024b). Such potential discharges of sediment would be detrimental to water quality and aquatic habitat.

In addition to erosion/sedimentation, the use of heavy construction equipment containing hazardous materials (e.g., fuel, oil, grease) could lead to accidental or inadvertent releases of such materials, which could subsequently result in adverse water quality impacts. Leaking equipment or spills onto soil could result in the materials being discharged into Santa Ana Creek or the San Benito River or leaching into groundwater.

Given that the Proposed Project would disturb more than 1 acre of land, coverage under the Construction General Permit would be required, including preparation and implementation of a SWPPP. In general, the SWPPP would include measures that would reduce potential discharges of pollutants during construction activities, such as sediments and hazardous materials. The SWPPP may include various BMPs to control erosion at the source and/or minimize sediment movement off-site (SWRCB 2022).

As described further in Section 3.9, “Hazards and Hazardous Materials,” transport, storage, use, and disposal of hazardous materials for the project’s construction activities would be performed in compliance with all applicable federal, state, and local laws and regulations. Furthermore, **Mitigation Measure HAZ-1 (Hazardous Materials Spill Prevention and Containment)** would require that spill containment measures be implemented for hazardous materials used during construction, and that spill cleanup materials be kept on site. Implementation of Mitigation Measure HAZ-1 would ensure that hazardous materials releases during construction are avoided/minimized to the extent feasible, and that damage to surface or groundwater quality is minimized in the event such releases do occur. As a result, project construction would not violate any water quality standards or WDRs or otherwise substantially degrade water quality. Therefore, this impact would be **less than significant with mitigation**.

Operation

The project operations would be similar to existing conditions, where the current CAL FIRE Hollister AAB is operated approximately 800 feet from the proposed new site. Many of the proposed operations would be similar to baseline (as shown in Table 2-1 in Chapter 2, *Project Description*), with some increases in activities and uses of hazardous materials (e.g., fire retardant). While the incremental increase in use of hazardous materials could increase potential for spills and discharges to waters, the facility and CAL FIRE would follow applicable federal, and state regulations pertaining to hazardous materials, which would reduce potential for impacts. Additionally, as discussed further under subsection (c) below, the inclusion of on-site stormwater management features would minimize potential for adverse water quality impacts associated with stormwater runoff (e.g., due to increased impervious surface area).

Therefore, operation of the Proposed Project would not violate any water quality standards or WDRs or otherwise substantially degrade water quality. The impact would be **less than significant**.

b. 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

The Proposed Project would involve construction of a new CAL FIRE Air Attack Base within the Hollister Municipal Airport, approximately 800 feet from the existing Air Attack Base facility. Given that the existing facility would not be demolished (but would remain for the time-being), this would add approximately 13.72 acres of impervious surface to the area. While the Proposed Project would capture stormwater on site, this could reduce groundwater recharge at this site (i.e., by inhibiting infiltration of precipitation/water into the soil and groundwater). Nevertheless, in the context of the larger groundwater basin, which is designated medium priority by DWR pursuant to SGMA, any reduction in groundwater recharge due to the Proposed Project would not be considered significant. Additionally, given the relatively minimal incremental change in operations (see Table 2-1), the Proposed Project would not substantially increase water use over the long term, such as to potentially affect groundwater supplies.

Project construction would use some water, primarily for dust control. At the discretion of the construction contractor, this water may be obtained directly from purveyors that obtain supply from groundwater sources; nevertheless, given the relatively minor amount of water needed and temporary nature of the demand, this would not substantially decrease groundwater supplies. As described in Section 3.10.2, the project site is located within the Gilroy-Hollister Valley Groundwater Basin, Hollister Area Subbasin (consolidated into the North San Benito Groundwater Basin), which is designated as medium priority by DWR. A GSP has been prepared for this basin, and the project's water use would not conflict with this plan or otherwise affect sustainable management of the basin.

As such, the Proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge, such that the Project may impede sustainable groundwater management of the basin. This impact would be **less than significant**.

c. 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:

i. result in substantial erosion or siltation on- or off-site—Less than Significant

During construction, the Proposed Project would alter the drainage pattern at the project site in the sense that it would create ground disturbance and excavation (e.g., trenching) for construction/installation of the proposed facilities. As discussed in item 3.10.3(a) above, this could result in erosion or siltation, as the soils disturbed by construction activities would be more susceptible to erosion and transport of sediments off site (e.g., into Santa Ana Creek or the San Benito River).

Given implementation of the SWPPP, as described in item 3.10.3(a), these impacts would not be significant. The SWPPP would include erosion- and sediment-control BMPs, which would substantially reduce the potential for substantial erosion or siltation on or off site as a result of project construction.

Over the long term, the Proposed Project would alter the existing drainage pattern of the site by adding approximately 13.72 acres of impervious surface (whereas the existing ground surface is pervious/unpaved). This could increase surface runoff generation; however, as described in Chapter 2, *Project Description,* the Proposed Project would include stormwater management components, including underground containment tanks, which would minimize off-site discharge of stormwater. As a result, any additional stormwater generated on site would not result in substantial erosion, sedimentation, or other adverse water quality impacts.

Therefore, this impact would be **less than significant.**

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite—Less than Significant

As described above in item 3.10.3(c)(i), the Proposed Project would create approximately 13.72 acres of additional impervious surface area, which would increase the rate and amount of surface runoff at the site. However, the Proposed Project would include stormwater management features, including underground containment tanks, which would minimize off-site movement of stormwater. The surrounding areas include other portions of the Hollister Municipal Airport (e.g., runways, taxiways, open ground), which include paved and unpaved areas. Generally, given the relatively modest size of the project site, the stormwater management components that would be incorporated, and the surroundings areas, substantial flooding impacts would not occur.

During construction, the Proposed Project would involve ground disturbance, which could temporarily increase the rate or amount of surface runoff at the site. With the work areas and/or staging areas denuded of vegetation, any precipitation falling on the site would likely flow off site more quickly than under baseline conditions. However, due to the project site's location within the Hollister Municipal Airport, which includes large uninhabited and unpaved areas, the surface runoff would likely sheet flow to adjacent areas (and/or otherwise be controlled through SWPPP measures) where it would then have an opportunity to infiltrate to the soil and groundwater. As a result, the additional runoff would not result in substantial flooding impacts.

Overall, the Proposed Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site. This impact would be **less than significant**.

iii. 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 with Mitigation

The project site is located within the Hollister Municipal Airport, which is not directly served by the City's storm drain system. Large portions of the airport property, including the project site, are relatively flat and unpaved areas where precipitation falling on the area would be expected to infiltrate to the soil and groundwater or sheet flow to nearby water bodies (e.g., Santa Ana Creek). For the reasons discussed above in item 3.10.3(c)(ii), the Proposed Project would add impervious surface and thereby increase the rate or amount of stormwater runoff. However, the stormwater runoff would be managed on site and collected in underground storage containers. As such, it would not affect the capacity of any existing or planned stormwater drainage systems.

As discussed in item 3.10.3(a) above, project construction would use a variety of hazardous materials contained in construction equipment or stored on site or at staging areas (e.g., fuel, oil, grease). These materials could potentially leak or spill, which could then lead to polluted runoff flowing off site. However, implementation of Mitigation Measure HAZ-1, which would require BMPs such as secondary containment and maintenance of spill cleanup kits, would substantially reduce the likelihood of accidental or inadvertent spills of hazardous materials during project construction activities. Over the longer term, project operations would use greater amounts of hazardous materials (e.g., fire retardant) relative to baseline (see Table 2-1 in Chapter 2, *Project Description*). However, the Proposed Project would incorporate preventative measures and comply with existing federal, state, and local laws and regulations pertaining to hazardous materials. Thus, the incremental increase in use of such materials would not pose a significant risk and would not contribute to the generation of polluted runoff.

With implementation of Mitigation Measure HAZ-1, the Proposed Project would not provide substantial additional sources of polluted runoff. Overall, the Proposed Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, the impact would be **less than significant with mitigation**.

iv. Impede or redirect flood flows—Less than Significant

The project site is located within the existing Hollister Municipal Airport, in an area that is not within any mapped FEMA flood hazard areas (FEMA 2024). As such, although the city of Hollister in general has historically experienced flooding, the project site would not likely be subjected to flood flows. Therefore, the above-ground elements of the Proposed Project (e.g., new buildings and structures) would not substantially impede or redirect flood flows over the long term. Similarly, during project construction, although large construction equipment and materials would be present on the site, it is not expected that flood flows would pass over the site; therefore, no impedance or redirection of flows would occur. Overall, the Proposed Project would not substantially alter the existing drainage pattern of the site or area in a manner that would impede or redirect flood flows. Therefore, the impact would be **less than significant**.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation—Less than Significant

As discussed in Section 3.10.2 and in item 3.10.3(c)(iv), the project site is not located within a mapped flood hazard area (FEMA 2024). Additionally, the project site is outside of any tsunami or seiche hazard zones. During project construction, heavy equipment containing hazardous materials (e.g., fuel, oil, grease) would be present at the project site, and hazardous materials could also be temporarily stored at project work areas; however, these areas would not be expected to experience flooding, tsunami, or seiche effects. Therefore, project construction activities would not risk release of pollutants due to these hazards.

Similarly, over the longer term, during project operation, hazardous materials (e.g., fire retardant) would be stored on site; however, the facility would not be within flood hazard, tsunami, or seiche zones. Therefore, the risk of release of pollutants due to these factors would not be substantial. This impact would be **less than significant**.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan—Less than Significant with Mitigation

As discussed under item 3.10.3(a), project construction would involve ground-disturbing activities and use of hazardous materials, which could result in releases of pollutants if proper precautions are not taken. This could conflict with or obstruct implementation of the Central Coast Basin Plan, as such pollutant discharges would potentially violate WQOs and impair achievement of beneficial uses (see Table 3.10-1) for nearby/downstream waterbodies. However, with implementation of the SWPPP and Mitigation Measure HAZ-1, the potential for construction-related pollutant discharges would be avoided or substantially reduced. Over the long term, the Proposed Project would not conflict with or obstruct the Central Coast Basin Plan, as it would not result in substantial operational pollutant discharges. The storage of hazardous materials (e.g., fire retardant) on site would follow applicable laws and regulations and include secondary containment.

The Proposed Project overlies the Gilroy-Hollister Valley Groundwater Basin, Hollister Area Subbasin, which was consolidated into the North San Benito Subbasin that is designated as medium priority pursuant to SGMA (DWR 2024b). A GSP has been prepared for the basin (San Benito County Water District and Valley Water 2021); however, no aspects of the Proposed Project would substantially conflict with or impair implementation of the GSP. As discussed in item 3.10.3(b) above, the Proposed Project would not use substantial quantities of groundwater during construction or operation relative to baseline. While it would add impervious surface (approximately 13.72 acres) and thus inhibit groundwater recharge to some degree, this would be a relatively minor effect in the context of the larger groundwater basin that would not reasonably impair achievement of the GSP's sustainability goals. As a result, the Proposed Project would not adversely affect the sustainability of the underlying groundwater supplies. Overall, this impact would be **less than significant with mitigation.**

3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Physically divide an established community?	☐	☐	☒	☐
b. 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?	☐	☐	☒	☐

3.11.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Code of Federal Regulations - FAR Part 77

FAR Part 77 – Safe Efficient Use, and Preservation of the Navigable Airspace outlines the requirements for providing notice to the FAA of proposed construction or alteration to existing structures, the standards used to define an obstruction, and the process for petitioning the FAA for discretionary review. As described in Section 77.9, any construction or alteration on a public use airport must file notice with the FAA.

State Laws, Regulations, and Policies

No state laws, regulations, or policies apply to land use and planning for the Proposed Project.

Local Laws, Regulations, and Policies

CAL FIRE is the lead agency for the Proposed Project, therefore local government land use planning and zoning regulations do not apply to the Proposed Project. Accordingly, the following discussion of local land use regulations is provided for informational purposes only.

3.11.2 Environmental Setting

The Proposed Project is located within the boundaries of the Hollister Municipal Airport, which is located within the city of Hollister, in San Benito County. The project site is classified by the City of Hollister as having both a land use and zoning classification of “Airport” (City of Hollister 2005, 2021). The project site consists of an open area which, aside from one road and one building, is undeveloped.

Land uses and zoning classifications in the vicinity of the project site include “Airport Support” and “Industrial” and “Light Industrial.”

3.11.3 Discussion of Checklist Responses

a. Divide an established community—Less than Significant

The Proposed Project consists of relocating existing Hollister AAB facilities within the airport area and constructing additional new facilities to better meet the safety and operational needs of the Hollister AAB. During construction of the Proposed Project, there may be temporary interruptions to traffic access within and around the airport as construction vehicles and materials move in and around the project site; however, these interruptions would not result in the division of an established community.

During operation, the Proposed Project would be in the same general location as the existing site, except on a different side of the runway. In further developing the area with pavement and hardscape, the Proposed Project would increase the amount of potential access points in and around the site for those who have authorization to be in the area and would not reduce the amount of existing access to areas around the project site. Therefore, the Proposed Project would not divide an established community or disrupt adjacent land uses. The impact would be **less than significant.**

b. 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—Less than Significant

The Proposed Project consists of relocating existing Hollister AAB facilities within the airport area, and both the old and new Air Attack Base sites share the same land use and zoning designations. Therefore, the Proposed Project would not permanently change land use or compliance with the zoning ordinance in the project area. Furthermore, FAR Part 77 requires that the FAA be involved in the process of developing the Proposed Project to ensure compliance with aviation safety rules. Finally, the Hollister Airport Plan (n.d.) discusses possible future designs and uses of airport land, one of which identifies the Air Attack Base in the location of the Proposed Project. Therefore, the Proposed Project is consistent with relevant land use plans, policies, and regulation and the impact would be **less than significant**.

3.12 MINERAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

3.12.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies are applicable to mineral resources in relation to the Proposed Project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain mineral resources of regional significance. The main objective of the SMARA classification-designation process is to ensure that mineral resources will be available when needed. Local jurisdictions are required to enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans.

There are four mineral resource zone (MRZ) classification-designations used in SMARA. These MRZ's are defined below (CDOC 2021):

- **MRZ-1:** Areas where available geologic information indicates that little likelihood exists for the presence of significant construction aggregate resources.
- **MRZ-2:** Areas where geologic information indicates the presence of significant construction aggregate resources.
- **MRZ-3:** Areas containing known or inferred construction aggregate resources of undetermined mineral resource significance.

- **MRZ-4:** Areas where available geologic information is inadequate to assign to any other mineral resource zone category.

Local Laws, Regulations, and Policies

CAL FIRE is the lead agency for the Proposed Project, therefore local regulations do not apply to the Proposed Project. Accordingly, the following discussion of local laws is provided for informational purposes only. Local laws, regulations, and policies are found in Appendix A.

3.12.2 Environmental Setting

According to the City of Hollister General Plan (2005), the State Mining and Geology Board has designated portions of the Hollister General Plan Area as having construction aggregate deposits (sand, gravel, and crushed rock) of regional significance. The City of Hollister, including the Hollister Municipal Airport and the project site, falls within the Monterey Bay Production-Consumption Region for aggregates. The nearest mapped mineral resource zone to the project site is located approximately 0.5 mile northwest and is presently operated as an aggregate plant. There are no mapped resources at the project site.

3.12.3 Discussion of Checklist Responses

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state—No Impact

According to the Mineral Resource Zone Map for Construction Aggregate in the Monterey Bay Production-Consumption Region (CDOC 2021), the project site is classified as MRZ-1, which identifies areas where available geologic information indicates that little likelihood exists for the presence of significant construction aggregate resources. The Proposed Project would have **no impact** related to loss of availability of a known mineral resource that would be of value to the region or the residents of the state.

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan—No Impact

The project site has not been identified as a locally important mineral resource recovery site delineated on any local or specific land use plans, nor would it interfere with an existing locally important mineral resource recovery site. Therefore, Proposed Project would have **no impact** on any locally important mineral resource recovery sites.

3.13 NOISE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project result in:				
a. 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?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels?	☐	☒	☐	☐

3.13.1 Overview of Noise and Vibration Concepts and Terminology

Noise

In the CEQA context, noise can be defined as unwanted sound. Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound level, or sound intensity. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary enormously within the range of human hearing, a logarithmic scale is used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all frequencies in the spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive, creating the A-weighted decibel (dBA) scale.

Different types of measurements are used to characterize the time-varying nature of sound. Below are brief definitions of these measurements and other terminology used in this chapter.

- **Decibel (dB)** is a measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.

- **A-weighted decibel (dBA)** is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Maximum sound level (L_{max})** is the maximum sound level measured during a given measurement period.
- **Minimum sound level (L_{min})** is the minimum sound level measured during a given measurement period.
- **Equivalent sound level (L_{eq})** is the equivalent steady-state sound level that, in a given period, would contain the same acoustical energy as a time-varying sound level during that same period.
- **Percentile-exceeded sound level (L_{xx})** is the sound level exceeded during *x* percent of a given measurement period. For example, L_{10} is the sound level exceeded 10 percent of the measurement period.
- **Day-night sound level (L_{dn})** is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels during the period from 10:00 p.m. to 7:00 a.m. (typical sleeping hours). This weighting adjustment reflects the elevated sensitivity of individuals to ambient sound during nighttime hours.
- **Community noise equivalent level (CNEL)** is the energy average of the A-weighted sound levels during a 24-hour period, with 10 dB added to the A-weighted sound levels during the period from 10:00 p.m. to 7:00 a.m. (typical sleeping hours). This weighting adjustment reflects the elevated sensitivity of individuals to ambient sound during nighttime hours.

In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level. **Table 3.13-1** presents approximate noise levels for common noise sources, measured adjacent to the source.

Table 3.13-1. Examples of Common Noise Levels

Common Outdoor Activities	Noise Level (dBA)
Jet flyover at 1,000 feet	110
Gas lawnmower at 3 feet	100
Diesel truck at 50 feet traveling 50 miles per hour	90
Noisy urban area, daytime	80
Gas lawnmower at 100 feet, commercial area	70
Heavy traffic at 300 feet	60
Quiet urban area, daytime	50
Quiet urban area, nighttime	40
Quiet suburban area, nighttime	30

Common Outdoor Activities	Noise Level (dBA)
Quiet rural area, nighttime	20

Source: Caltrans 2013

Vibration

Ground-borne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in Hertz (Hz). Most environmental vibrations consist of a composite, or "spectrum," of many frequencies. The normal frequency range of most ground-borne vibrations that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration information for this analysis has been described in terms of the peak particle velocity (PPV), measured in inches per second (in/sec), or of the vibration level measured with respect to root-mean-square vibration velocity in decibels (VdB), with a reference quantity of 1 micro-inch per second.

Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High-frequency vibrations reduce much more rapidly than do those characterized by low frequencies, so that in a far-field zone distant from a source, the vibrations with lower frequency amplitudes tend to dominate. Soil properties also affect the propagation of vibration. When ground-borne vibration interacts with a building, a ground-to-foundation coupling loss usually results but the vibration also can be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. In some cases, the vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as ground-borne noise.

Ground-borne vibration is generally limited to areas within a few hundred feet of certain types of industrial operations and construction/demolition activities, such as pile driving. Road vehicles rarely create enough ground-borne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes.

3.13.2Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Project. However, the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* states that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA L_{eq} should be used for residential areas (FTA 2018).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of

0.12 inches per second (in/sec) PPV for buildings extremely susceptible to vibration damage (FTA 2018). The ground-borne vibration annoyance level is 65 VdB for buildings where vibration would interfere with interior operations, 72 VdB for residences, and 75 VdB for institutional land uses with primarily daytime uses.

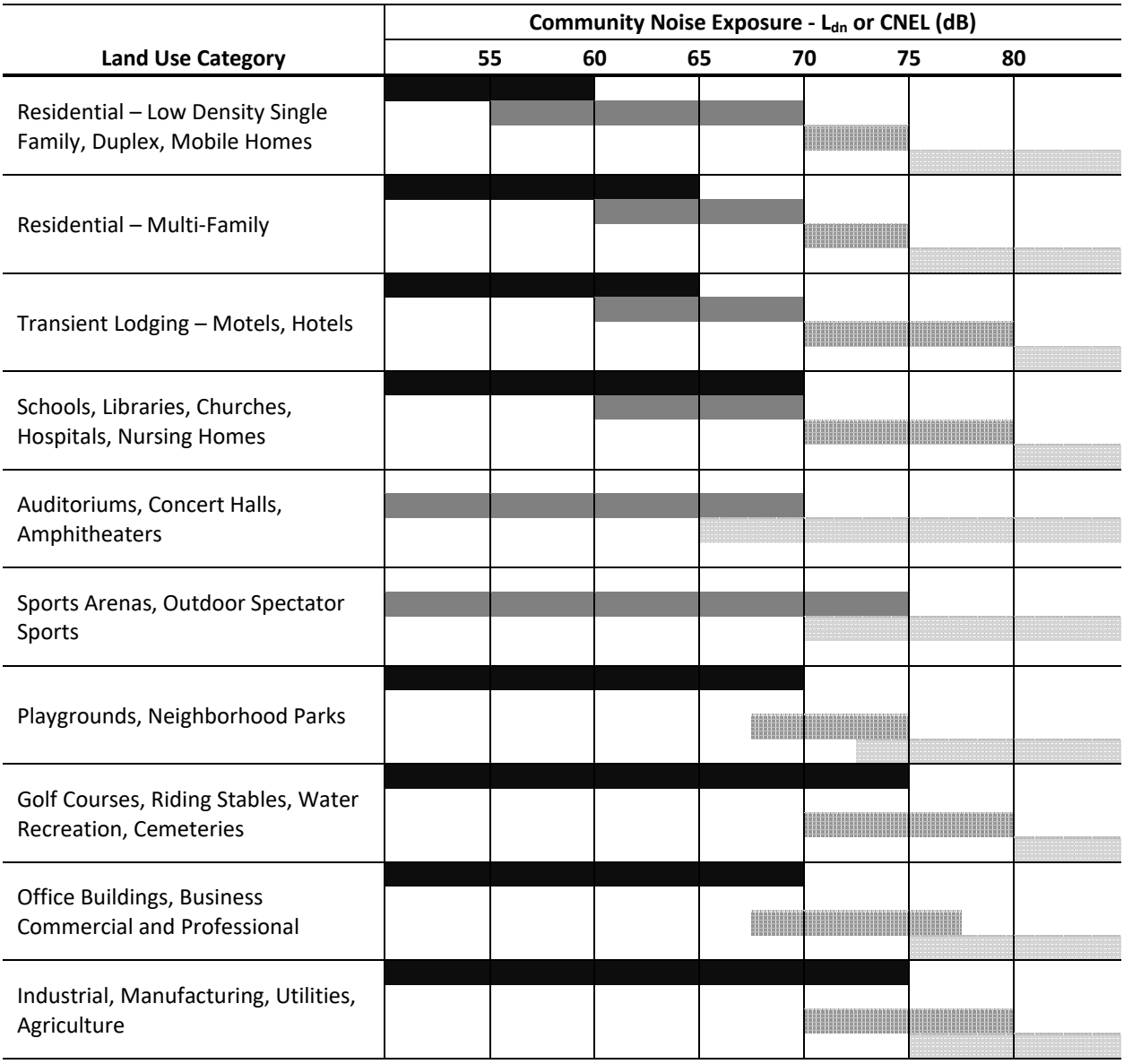
State Laws, Regulations, and Policies

State Land Use Compatibility Guidelines

California requires each local government entity to implement a noise element as part of its general plan. California Administrative Code, Title 4, presents guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The state land use compatibility guidelines are listed in **Table 3.13-2**.

For the protection of fragile, historic, and residential structures, Caltrans recommends a more conservative threshold of 0.2 in/sec PPV for normal residential buildings and 0.08 in/sec PPV for old or historically significant structures (Caltrans 2020).

Table 3.13-2. State Land Use Compatibility Standards for Community Noise Environment



Normally Acceptable:	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
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 are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable:	New construction or development should generally 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 included in the design.
Clearly Unacceptable:	New construction or development generally should not be undertaken.

Source: California Governor's Office of Planning and Research 2017

Local Laws, Regulations, and Policies

The City of Hollister Noise Ordinance does not have any noise restrictions or limits applicable to the Proposed Project since it is not on or contiguous to residential properties.

The Hollister Municipal Airport Land Use Compatibility Plan (San Benito County Airport Land Use Commission 2012) specifies noise levels from the Hollister Municipal Airport and compatible land uses based on the CNEL levels. The Land Use Compatibility Plan does not apply to lands within the Hollister Airport influence area controlled by federal or state agencies or by Native American tribes. Thus, the noise land use restrictions do not apply to the Proposed Project since Cal FIRE is a state agency. Portions of the project site are located in areas with a CNEL of greater than 70 dB, 65-70 dB, and 60-65 dB.

3.13.3 Environmental Setting

Aircraft noise is the primary source of noise near the Proposed Project. Other significant local noise sources include motor vehicles and construction. The Proposed Project is located within the boundaries of the Hollister Municipal Airport, within the 70+, 65-70, and 60-65 dB CNEL noise contour. Aircraft activity at the airport is the primary source of noise in the project area.

Sensitive receptors in the vicinity of the Proposed Project consist primarily of people working at the airport and nearby industrial facilities. The distance from the closest project locations to the nearest residences on Airport Drive and Aerostar Way are 350 feet The nearest schools are located more than 2 miles away, and churches are located about a half mile away.

3.13.4 Discussion of Checklist Reponses

a. 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

The Proposed Project would generate noises associated with construction activities (e.g., grading and excavation activities) that would temporarily increase noise levels and would cease once construction is complete. Following construction, operation and maintenance-related noise sources would result from operation of the Proposed Project which would include noise associated with aircraft and helicopters, use of mechanical equipment including pumps, generator, and flame-retardant mixer.

The nearest sensitive receptors are located along Airport Drive and Aerostar Way approximately 350 feet from the closest project site. The Proposed Project will also have an on-site dormitory, which will contain workers associated with project operations. The 90 dBA noise threshold occurs at 39.8 feet from a project work area. There are no sensitive receptors located within this distance. Detailed noise calculations are provided in Appendix E.

Operational noise will occur from the use of aircraft and helicopters at the airport similar to existing levels as characterized in the airport land use plan. The Proposed Project will have additional operational noise from the operation of pumps, emergency generator, mixer, and

dust control equipment. This additional operational noise will be unlikely to change the CNEL level substantially compared to the existing noise at the airport.

Project construction activities would occur on weekdays between the hours of 8:00 a.m. and 6:00 p.m., which is within the construction hours allowed by the City of Hollister Municipal Code. Additionally, the Proposed Project is by a state agency and is exempt from the limitations listed in the municipal code. Therefore, because the Proposed Project would be in compliance with the City of Hollister Municipal Code and no sensitive receptors would be exposed to noise in excess of the threshold or current operational noise levels at the airport, this impact would be **less than significant**. No mitigation is required.

b. Generation of excessive groundborne vibration or groundborne noise levels—Less than Significant

Vibration thresholds for buildings occur at a PPV of 0.2 in/sec for normal; the human annoyance threshold is at 72 VdB for residences and 75 VdB for institutional land uses with primarily daytime uses. Vibration and ground-borne noise levels associated with the Proposed Project were estimated following methods described in the FTA Noise and Vibration Impact Assessment (FTA 2018) to determine the PPV that would potentially impact buildings and the vibration VdB for annoyance. It was assumed that the equipment would have similar vibration sound levels as a vibratory roller (at project sites requiring paving). **Table 3.13-3** shows relevant parameters for the construction equipment used for the Proposed Project and distance to sensitive receptors to be below vibration thresholds.

Table 3.13-2. Construction Equipment and Vibration Distance

Equipment	PPV at 25 ft	Distance to PPV of 0.2 in/sec	Noise Vibration Level at 25 ft	Distance to Noise Vibration of 72 VdB
Vibratory Roller	0.21 in/sec	25.8 feet	94 VdB	135.3 feet

Calculations are provided in Appendix E.

Table 3.13-3 shows that the vibration noise is below the human annoyance level of 72 VdB at 153.3 feet from the project area and that the building damage threshold is at 25.8 feet. There are no sensitive receptors or sensitive buildings within these threshold distances. Operation of the Proposed Project would not generate any new sources of vibration. Therefore, since the vibration is below the annoyance level and there are no buildings within the damage threshold, this impact would be **less than significant**. No mitigation is required.

c. For a project located within the vicinity of a private airstrip or an airport land use plan area, or, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels—Less than Significant with Mitigation

The Proposed Project is located within the Hollister Municipal Airport. The CNEL levels at the Proposed Project site are in the 70+,65-70, and 60-65 dB contours. The Proposed Project plans to have workers and on-site dormitories for workers. The CNEL levels would generally be incompatible to conditionally compatible for the workers and dormitories. To address the noise

levels, the dormitories and buildings that will serve as offices for workers should be designed to ensure the inside noise levels are consistent with the USEPA guidelines (USEPA 1974) for levels of noise that protect public health and welfare with an adequate margin of safety which is 45 dBA for indoors for preventing interference and annoyance. **Mitigation Measure NOI-1 (Operational Noise Evaluation)** will require that the design of the buildings with workers or dormitories ensure that noise levels indoors are consistent with USEPA noise public health and welfare standards of 45 dBA. With implementation of Mitigation Measure NOI-1, the impact would be **less than significant with mitigation**.

Mitigation Measure NOI-1: Operational Noise Evaluation

The Proposed Project or its designated contractors will ensure by doing a detailed noise analysis that the final design and location of offices and that the noise level at any worker or dormitory indoor buildings results in a noise level of 45 dBA or less.

3.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.14.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to population and housing in relation to the Proposed Project.

State Laws, Regulations, and Policies

No state laws are applicable to population and housing in relation to the Proposed Project.

Local Laws, Regulations, and Policies

CAL FIRE is the lead agency for the Proposed Project, therefore local government land use planning and zoning regulations do not apply to the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only. Local laws, regulations and policies are listed in Appendix A.

3.14.2 Environmental Setting

The project site is within the city of Hollister in the Hollister Municipal Airport. The airport serves the aviation needs of the local community including private and commercial aircrafts.

The population of the city of Hollister was 44,658 as of July 1, 2024 (U.S. Census Bureau 2024). The city of Hollister is allocated to build 4,163 housing units between 2023 and 2031 (City of Hollister 2024). The majority of jobs in Hollister are in office and administrative support, sales and related occupations, and construction and extraction (Data USA 2024).

3.14.3 Discussion of Checklist Responses

a. Induce unplanned population growth—Less than Significant

During construction, the Proposed Project would employ a small number of workers temporarily. These workers are anticipated to live locally or commute to the project site and would not generate substantial population growth in the area. The Proposed Project does not involve characteristics such as building homes or businesses that would directly generate population growth nor would the Proposed Project extend roadways. The Proposed Project would build a dormitory for on-site workers but would not induce substantial population growth.

The purpose of the Proposed Project is to relocated facilities and operations approximately 500 feet west of existing facilities for increased efficiency and safety of operations of the Hollister AAB. The Proposed Project does not involve any increase in water diversion, staffing, and overall operations would be similar to previous operational condition. This likely would not indirectly induce additional growth in the region. Therefore, there would be **less than significant**.

b. Displace a substantial number of existing people or housing—No Impact

The Proposed Project would relocate the Hollister AAB and is not displacing people or housing as a result of the Proposed Project. Therefore, there would be **no impact**.

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

3.15.1 Environmental Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies are applicable to public services in relation to the Proposed Project.

State Laws, Regulations, and Policies

CALGreen (California Building, Electrical, and Fire Codes)

The California Building Standards Code (Title 24 of the CCR) – also known as CALGreen – serves as the basis for the design and construction of buildings in California. 24 CCR Part 3 is the Electrical Code, which contains standards for electrical systems, including safety features such as overcurrent protection, surge arresters, and proper wiring methods. 24 CCR Part 9 is the California Fire Code. This portion of the code contains requirements related to emergency planning and preparedness, fire service features, building services and systems, fire-resistance-rated construction, fire protection systems, and construction requirements for existing buildings, as well as specialized standards for specific types of facilities and materials.

Local Laws, Regulations, and Policies

CAL FIRE is the lead agency for the Proposed Project, therefore local regulations do not apply to the Proposed Project. Accordingly, the following discussion of local laws is provided for informational purposes only. Local laws, regulations, and policies are found in Appendix A.

3.15.2Environmental Setting

Fire Protection

Fire protection services for all of San Benito County, including for the city of Hollister, which is a census-designated place, are provided by the Hollister Fire Department (HFD). HFD operates a total of four fire stations and a training tower, and the U.S. Fire Administration (USFA) reports a total of 47 active firefighters (USFA n.d.). The project site would be served by HFD's Fire Station 3, located at 60 Airport Drive, which is on the same property as the project site.

Police Protection

Law enforcement services at the project site are provided by the San Benito County Sheriff's Office. The San Benito County Sheriff's Office is located at 2301 Technology Parkway, (approximately 0.7 mile east of the project site). Error! Reference source not found. provides the San Benito County Sheriff's Office Uniform Crime Reporting (U.C.R.) statistics for San Benito County.

Table 3.15-1. 2020 Crime Statistics for San Benito County

Crime	Number of Reports
Homicide	3
Rape	20
Robbery	19
Aggravated Assault	122
Burglary	105
Larceny-Theft	336
Motor Vehicle Theft	132

Source: Board of State and Community Corrections 2022

Schools

The area in the vicinity of the project site is served by the Hollister School District and the San Benito High School District. The Hollister School District is made up of one grade TK-5 elementary school, six TK-8 schools, one 5-8 and two 6-8 middle schools, while the San Benito High School District is comprised of one high school. Total enrollment for the two school districts is 9,135 students, with a staff of 1,096 employees (Hollister School District 2024, San Benito High School District 2024). The nearest school to the project site is Hollister Seventh Day Adventist Christian School, a private school, which is located approximately 2.9 miles southeast at 400 Isabel Lane.

Parks

As of 2019, the city of Hollister contains eight pocket parks, six neighborhood parks and one community park (City of Hollister, 2019). The closest park to the project site is a pocket park, Jerry Gabe Memorial Park also known as Hollister Wayside Park, located approximately 460 feet west (City of Hollister, 2019).

Other Public Facilities

San Benito County Jail and Juvenile Hall are located approximately 0.2 mile south of the project site. Additionally, San Benito County Planning and Public Works are located approximately 0.4 mile east. The nearest medical center to the project site is the Mabie Health Care Center which is located approximately 2.1 miles south.

3.15.3 Discussion of Checklist Responses

a. Result in adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities

i. Fire protection—No Impact

Neither construction nor operation of the Proposed Project would create an increase in population that could lead to a higher demand for fire protection or would require the need for new or physical altered fire protection facilities. The Proposed Project would replace the existing Hollister AAB and would meet the need for existing fire protection services. Because the Proposed Project would not generate demand for fire protection or require the provision of new or altered facilities, the Proposed Project would have **no impact** on fire protection services.

ii. Police protection—No Impact

Neither construction nor operation of the Proposed Project would create an increase in population that could lead to a higher demand for police protection or create changes to the surrounding area (such as road closures) that would affect police response times. During construction, equipment would remain on site and would be fenced and gated. Because the Proposed Project would not generate substantial demand for police protection, affect average response times, alter other metrics of performance, or require the provision of new police facilities, there would be no impact to police protection services.

iii. Schools—No Impact

The nearest school is the Hollister Seventh Day Adventist Christian School, which is located 2.9 miles southeast of the project site. The Proposed Project would not affect existing school facilities, nor would it contribute to a substantial change in population that would require construction of new schools. There would be **no impact** to existing schools.

iv. Parks—No Impact

The Proposed Project would not involve or indirectly result in the construction of or displacement of any existing parks or recreational facilities. Construction activities would not require the temporary closure of any nearby parks or recreational facilities, or otherwise affect the access or use of such facilities. There would be **no impact** to existing parks or recreational facilities.

v. Other public facilities—No Impact

Neither construction nor operation of the Proposed Project would create an increase in population that could lead to a higher demand for public facilities or would require the need for new or physical altered public facilities. The Proposed Project would replace the existing Hollister ABB. Therefore, there would be **no impact** to other public facilities.

3.16 RECREATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.16.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to recreation in relation to the Proposed Project.

State Laws, Regulations, and Policies

No state laws are applicable to recreation in relation to the Proposed Project.

Local Laws, Regulations, and Policies

Applicable local laws, regulations, and policies are listed in Appendix A.

3.16.2 Environmental Setting

The Proposed Project is in northern San Benito County and the project site is located approximately 1478 feet west of Jerry Gabe Memorial Park also known as Hollister Wayside Park. Jerry Gabe Memorial Park is approximately 1.9 acres in size and is predominantly made up of an open grassy area that functions as a dog park. There is a small play structure and picnic area present at the northern end of the park. (San Benito County Parks and Recreation n.d., City of Hollister 2019).

3.16.3 Discussion of Checklist Responses

a. Increase use of existing parks or recreational facilities—No impact

The parking area for Jerry Gabe Memorial Park is accessible from San Felipe Road. During construction, access to Jerry Gabe Memorial Park would remain the same as existing conditions and the park would not be closed or affected during construction of the Proposed Project.

Therefore, visitors would not need to find a replacement park or recreational facility during construction of the Proposed Project.

During operation of the Proposed Project, access to Jerry Gabe Memorial Park would remain the same as existing conditions. As noted in Section 2.5.3, "Operations and Maintenance," the Proposed Project would not result in an increase of staff members on site and, as a result, there would not be an increase in employees relocating to the area. Therefore, the Proposed Project would not increase the demand for recreational facilities in the area. As a result, there would be **no impact** to existing parks or recreation facilities.

b. Creation of new or altered recreational facilities—No Impact

The Proposed Project would not create or permanently alter any parks or recreational facilities. Likewise, the Proposed Project would not introduce substantial numbers of people to the area or otherwise cause the need to construct new or altered parks or recreational facilities. Therefore, **no impact** would occur.

3.17 TRANSPORTATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b. Would the project conflict or be inconsistent with CEQA Guidelines section 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?	☐	☒	☐	☐

3.17.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Code of Federal Regulations – FAR Part 77

FAR Part 77 – Safe Efficient Use, and Preservation of the Navigable Airspace outlines the requirements for providing notice to the FAA of proposed construction or alteration to existing structures, the standards used to define an obstruction, and the process for petitioning the FAA for discretionary review. As described in Section 77.9, any construction or alteration on a public use airport must file notice with the FAA. Any construction at an airport requires FAA approval to ensure it does not interfere with airport operations.

Section 77.9 Construction or alteration requiring notice

a) Any construction or alteration that is more than 200 feet above ground level at its site.

b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:

(1) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 feet in actual length, excluding heliports.

(2) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.

(3) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.

c) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.

d) Any construction or alteration on any of the following airports and heliports:

(1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications.

(2) A military airport under construction, or an airport under construction that will be available for public use.

(3) An airport operated by a federal agency or the U.S. Department of Defense.

(4) An airport or heliport with at least one FAA-approved instrument approach procedure.

e) You do not need to file notice for construction or alteration of:

(1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation.

(2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose.

(3) Any construction or alteration for which notice is required by any other FAA regulation.

(4) Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

State Laws, Regulations, and Policies

No state laws, regulations, or policies are applicable to transportation in relation to the Proposed Project.

Local Laws, Regulations, and Policies

No local laws, regulations, or policies are applicable to transportation in relation to the Proposed Project.

3.17.2Environmental Setting

The Proposed Project involves the construction of new buildings for CAL FIRE to relocate their existing Hollister AAB facilities to the CVH. The existing Hollister AAB facility is located 500 feet east of the proposed facility relocation.

Existing Vehicle Access

Access to the project area is via Aerostar Way. Aerostar Way is accessed from Aerostar Drive and Flynn Road via State Route (SR) 25 or SR-156B. Aerostar Drive and Flynn Road are local roadway and SR-25 and SR-156B are a two-lane highway.

Existing Bicycle and Pedestrian Facilities

Pedestrian facilities and bike lanes are available in the city of Hollister but there is minimal bicycle and pedestrian infrastructure located adjacent to the project site. Cyclists are legally allowed to ride on the shoulder of SR-25 and SR-156B. Under California law, bicycles could access the area via Aerostar Way and Flynn Road.

Existing Transit Service

Public transit service is provided regionally by County Express by San Benito County Transit within the city of Hollister. The closest bus stop would be at 4th and San Benito Streets, which is approximately 3 miles south of CVH.

Intercounty public transit (intercounty route and intercounty limited service) is also provided by Country Express from Gilroy Caltrain Station to Gavilan College, to Abbe Park in San Juan Bautista, to the city of Hollister (three bus stops: 4th at Miller, 4th at San Benito Street, and Vets Park). However, there are no intercounty public transit bus stops within the vicinity of the project site. The closest intercounty public transit stop would be at 4th at San Benito Street, approximately 3 miles south of CVH.

3.17.3Traffic and Transportation Terminology

The following are definitions of key traffic and transportation terms used in this section based on the *Highway Capacity Manual* by the Transportation Research Board (2000), *Urban Public Transportation Glossary* by Transportation Research Board (1989), and The *Freeway Management and Operations Handbook* by the Federal Highway Administration (FHWA) Office of Transportation Management (2003).

Average daily traffic (ADT): the average number of vehicles traveling through a specific point or road during a given time period that is shorter than one year (from 2 to 364 consecutive days). ADT can be applied to a variety of time periods (season, month, a week, or specific day). ADT is calculated by total traffic volume during a given time period that is divided by number of days in that time period; it is then expressed as vehicles per day (VPD).

Delay: the additional travel time experienced by a driver, passenger, or pedestrian.

Freeway: a multilane, divided highway with a minimum of two lanes for the exclusive use of traffic in each direction and full control of access without traffic interruption. Freeways are controlled access routes that provide for major intra and interregional travel. They are corridors that accommodate trips at highest speeds with access only from selected links to the network, consistent with the population and network densities of the areas they traverse.

Arterial Streets: streets intended to carry high volumes of traffic between major destinations like commercial centers and a central business district, acting as a primary route to distribute traffic from freeways to smaller roads serving residential areas.

Collector Streets: a surface street that provides land access and traffic circulation within residential, commercial, and industrial areas. Collector streets collect and distribute traffic to and from major highways and local streets. Collector streets also serve secondary traffic generators such as shopping and business centers, schools, parks, and high density or large-scale residential areas.

Vehicle Miles Traveled (VMT): a transportation metric for roadway use that measures the amount of vehicle travel (cars, trucks, and buses on public roads) in a geographic area over a given period of time, typically a one-year period. VMT is calculated by adding up all the miles driven by all cars and trucks on all the roadways in a region. This measure of mobility is used as the primary measure of travel activity on the highway system and the measurement helps to assess traffic volumes, transportation patterns, and environmental impacts such as emissions in regard to policy decisions for roadways and other transportation infrastructure.

3.17.4 Discussion of Checklist Responses

a. Conflict with applicable circulation plans, ordinances, or policies and applicable congestion management programs—Less than Significant

As described in Chapter 2, *Project Description*, construction of the Proposed Project is anticipated to last for approximately 27 months and would begin the last quarter of 2027. Construction activities would take place Monday through Friday between 7 a.m. and 6 p.m. After-hours work and work on Saturdays, Sundays, and State holidays would be permitted at the discretion of the State of California. As described in Chapter 2, *Project Description,* Section 2.5.2, under "Construction Equipment and Personnel," the construction crew on site will vary with the peak work resulting in approximately 70 total workers per day. That number of workers would be an estimated 20 building workers, 10 plumbers, 15 electricians, and 15 miscellaneous crew members. Construction staging would occur on site and would not affect the existing roadway network. Project activities would generate some worker and maintenance vehicle trips. It is unlikely that the construction vehicles would result in congestion or would increase traffic volumes on local roads in the vicinity of the Proposed Project during construction.

The Proposed Project would involve the construction of new buildings including a 32-bedroom dormitory, two office buildings, a 50-vehicle parking lot, repair shop, operations building, storage building, covered fire pump test pit, metal water tank, vehicle fueling station, gym building, three bay storage, hangers, S2-T canopies, helicopter training tower, and fire retardant mixing station.

Project operations would remain the same as existing operations, which includes refueling, retardant loading of fixed-wing aircraft, and flight operations for the Firehawk helicopter. The change to existing operations would be the housing of staff on base with the installation of the 32-bed barracks. Additionally, there would be the added features of canopies and hangers for both helicopter and fixed-wing aircraft, a dedicated helipad (the airport makes the Firehawk land in an open field across the runway from the existing base), an Air Operations building with communications tower and antenna, and a site-wide emergency generator to conduct 24-hour/ 7-days-a-week operations that include night operations. There would be an increase in the quantities of retardant mixture, along with increased days of training and parked cars on site. The Proposed Project's incremental change in operations is summarized in Table 2-1 in Section 2.5.3.

The Proposed Project would not entail a change in land use from existing conditions, nor would it introduce factors that would generate new or unanticipated long-term changes in ADT or VMT. Therefore, no direct or cumulative population growth would occur that is not already incorporated into regional growth projections.

The Proposed Project would not adversely affect future transit service, nor would it create a demand for alternative transportation systems. The project construction activities would not directly impact any transit routes or pedestrian/bicycle facilities (no such routes or facilities are present on or in immediate proximity to the project site), and it would not increase population over the long term, such as to increase demand for services. In addition, the magnitude of increased traffic on the road resulting from project construction would not affect pedestrian and bicycle safety, and thus would not conflict with the goals and policies of applicable plans. As a result, there would be **no impact**.

b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)—No Impact

Project construction would not entail a change in land use from existing conditions. However, project construction would temporarily impact ADT, though it would not generate unanticipated long-term changes. Additionally, project construction would not impact VMT. The operations of the Proposed Project would not entail a change in land use from existing conditions or introduce factors that would generate new or unanticipated long-term changes in ADT or VMT, such as residences and facilities. Roadway capacity would be unaffected during the operations of the project facilities. Therefore, the Proposed Project would not conflict, or be inconsistent, with CEQA Guidelines Section 15064.3(b)(2). The impact would be **less than significant**.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)—Less than Significant with Mitigation

Construction vehicles on the project site would be stored at one staging area, which would be inside the CVH and, therefore, not accessible to the public. All project activities would be confined within the CVH. Construction is anticipated to last for approximately 27 months. Construction vehicles, slow-moving equipment, and trucks could potentially interfere with the flow of traffic on Aerostar Drive and Flynn Road, resulting in a traffic hazard that could be significant. Implementation of **Mitigation Measure TR-1 (Prepare and Implement a**

Construction Traffic Management Plan) would reduce this impact to a less-than-significant level with mitigation by ensuring that the presence of construction traffic would not result in a lane hazard.

Mitigation Measure TR-1. Prepare and Implement a Construction Traffic Management Plan

A construction traffic management plan shall be prepared and implemented to manage traffic flow during construction, reduce potential interference with local emergency response plans, reduce potential traffic safety hazards, and ensure adequate access for emergency responders. The plan shall include, but not be limited to, the following measures:

- Identify construction truck haul routes and timing to limit conflicts between truck and automobile traffic on nearby roads. The identified routes will be designed to minimize impacts on vehicular and pedestrian traffic, circulation, and safety.
- Provide signage indicating the access route.
- Coordinate construction activities to ensure that one travel lane remain open at all times, unless flaggers or temporary traffic controls are in place, to provide emergency access.
- Evaluate the need to provide flaggers or temporary traffic control to assist trucks in accessing the roadway with minimal disruption of traffic.
- Document road pavement conditions before and after project construction. Make provisions to monitor the condition of roads used for haul routes so that any damage or debris attributable to haul trucks can be identified and corrected. Roads damaged by construction vehicles shall be repaired to their preconstruction condition.

Over the long term, the Proposed Project would not require changes to any road configurations that could create sharp curves or dangerous intersections. Additionally, the Proposed Project would not generate a substantial number of truck trips (approximately 50 trips over 27 months) by equipment or vehicles that would be incompatible with the roadway and potentially create a hazard. Implementation of Mitigation Measure TR-1 would reduce the potential for traffic to be affected by construction activity; this impact would be **less than significant with mitigation**.

d. Inadequate emergency access—Less than Significant with Mitigation

As discussed in item 3.17.4(c), project construction would take place at a location that is not open to public access. Approximately 50 truck trips would be generated during the construction period. The project site would be accessed via Aerostar Drive. During project construction, emergency access could be temporarily restricted from the presence of construction vehicles or slow-moving trucks on local roads. As discussed under item (c) implementation of Mitigation Measure TR-1 would require the construction contractor to identify construction haul routes that minimize traffic on nearby streets. Implementation of this mitigation measure would reduce construction-related impacts on emergency access to a less-than-significant level.

As previously described, operational traffic would not substantially reduce the effectiveness of nearby roadways or impair emergency access on these roads. For these reasons, the Proposed Project would not be expected to result in inadequate emergency access and, even with increased activity, any impacts of project operation would be less than significant.

While the presence of slow-moving equipment and trucks on these roadways could potentially interfere with emergency access (e.g., if an emergency were to occur at the same time that such equipment and/or trucks are utilizing the roadways), with implementation of Mitigation Measure TR-1 the impacts would not be substantial and would be minimized through adherence to traffic laws. In conclusion, impacts related to emergency access as a result of the Proposed Project would be less than significant with mitigation.

Following construction, the Proposed Project would not generate any vehicle or truck trips apart from trips associated with operations associated with CVH. Additionally, the Proposed Project would not create any new physical barriers or limitations to access for emergency vehicles; rather, the existing access would remain unchanged following implementation of the Proposed Project. For these reasons, with implementation of Mitigation Measure TR-1, the Proposed Project would not result in inadequate emergency access and the impact would be **less than significant with mitigation.**

3.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Proposed Project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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)	☐	☐	☐	☒
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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

3.18.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Project.

State Laws, Regulations, and Policies

In addition to the State laws and regulations listed in Section 3.5, “Cultural Resources,” the Proposed Project must also comply with Pub. Res. Code Section 21080.3.1 (also referred to as AB 52), which requires that CEQA lead agencies consult with any California Native American tribe that is traditionally and culturally affiliated with the geographic area of a project if so requested by the tribe, and if the agency intends to release a negative declaration, mitigated

negative declaration, or environmental impact report for a project. The law also specifies, under Pub. Res. Code Section 21084.2, that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource (TCR) is considered a project that may have a significant effect on the environment. CAL FIRE, as the CEQA lead agency, has consulted with Native American tribes pursuant to Pub. Res. Code Section 21080.3.1.

As defined in Pub. Res. Code Section 21074(a), TCRs are:

(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 CRHR; or

   (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.

TCRs are further defined under Section 21074(b) and (c) as follows:

   (b) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

   (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 to the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to Section 21080.3.2 or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

Local Laws, Regulations, and Policies

Local laws, regulations, and policies applicable to the Proposed Project with regard to TCRs are listed in Appendix A.

3.18.2Environmental Setting

The Proposed Project is located in the traditional ancestral territory of the Mutsen Ohlone. No tribes with a traditional and cultural affiliation to the project area have requested consultation with CAL FIRE on department projects pursuant to Pub. Res. Code Section 21080.3.1. However, in the spirit of compliance with Pub. Res. Code Section 21080.3.1, local tribes who were

identified by the NAHC as having a traditional and cultural association with the project area were notified about the Proposed Project via letters dated October 29, 2024. Follow-up emails were sent, on November 5, 2024, to those who had not yet responded to the original letter. As planning proceeds, the State will continue to consult with interested tribal representatives regarding the Proposed Project and incorporate their concerns into project planning and mitigation as warranted.

Table 3.18-1 lists all those tribal representatives contacted and summarizes the results of the consultation.

Table 3.18-1. Tribal Communication to Date

Organization/Tribe	Name of Contact	Letter Date	Follow Up	Responses
Amah Mutsun Tribal Band	Ed Ketchum, Vice-Chairperson	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.
Amah Mutsun Tribal Band	Valentin Lopez, Chairperson	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.
Amah Mutsu Tribal Band of Mission San Juan Bautista	Irene Zwierlein, Chairperson	October 29, 2024	Email follow up was sent on November 5, 2024.	Responded Nov. 7, 2024; Provided letter of response with recommendations from Most Likely Descendant.
Costanoan Ohlone Rumsen-Mutsen Tribe	Patrick Orozco, Chairman	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.
Costanoan Rumsen Carmel Tribe	Carla Munoz, Tribal Council	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.
Costanoan Rumsen Carmel Tribe	Samuel Rodriguez, Cultural Resource Officer	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.
Costanoan Rumsen Carmel Tribe	Henry Muñoz, Cultural Resource Officer	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.

Organization/Tribe	Name of Contact	Letter Date	Follow Up	Responses
Indian Canyon Mutsun Band of Costanoan	Ann Marie Sayers, Chairperson	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.
Indian Canyon Mutsun Band of Costanoan	Kanyon Sayers-Roods, MLD Contact	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.
Northern Valley Yokut / Ohlone Tribe	Timothy Perez, Tribal Compliance Officer	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.
Northern Valley Yokut / Ohlone Tribe	Katherine Perez, Chairperson	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.
Wuksachi Indian Tribe/ Eshom Valley Band	Kenneth Woodrow, Chairperson	October 29, 2024	Email follow up was sent on November 5, 2024.	No response to date.

3.18.3 Discussion of Checklist Responses

a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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)—No Impact

Although CAL FIRE notified tribes with a traditional and cultural affiliation with the area about the Proposed Project, none of the tribes contacted identified TCRs in the project area. Furthermore, no TCRs were determined by the lead agency, in its discretion and supported by substantial evidence, to be significant are known to be located in the project vicinity. No TCRs that are listed or eligible for listing in the CRHR or on any other local register of historical resources as defined by Pub. Res. Code Section 21074 have been identified within the project area. Therefore, there would be **no impact** to known TCRs as a result of the Proposed Project.

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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe—Less than Significant with Mitigation

Although it is not anticipated, it is possible that Native American archaeological artifacts or Native American human remains that would be determined to be TCRs could be discovered during project construction. If such archaeological or human remains are identified, they would be treated according to **Mitigation Measure CR-1** or **Mitigation Measure CR-2**, respectively, as described in Section 3.5, "Cultural Resources." Implementation of these mitigation measures would result in a less-than-significant impact with regard to potential TCRs. As a result, this impact would be **less than significant with mitigation.**

3.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. 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?	☐	☐	☒	☐
d. 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?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

3.19.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Clean Water Act

The CWA was originally enacted in 1948 and has been amended numerous times, with significant expansions in 1972 and 1977. The CWA's main objectives are to maintain and restore the chemical, physical, and biological integrity of waters through the authorization of standards. Authority for the implementation and enforcement of the CWA lies primarily with the USEPA and its delegated state and local agencies, the SWRCB and, in the project area, the Central Valley RWQCB.

State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989, enacted through AB 939 and modified by subsequent legislation, required all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by 2000 (Pub. Res. Code Section 41780). Later legislation mandated that the 50 percent diversion requirement be achieved every year. A jurisdiction's diversion rate is the percentage of its total waste that is diverted from disposal through reduction, reuse, and recycling programs. The State, acting through the California Integrated Waste Management Board, determines compliance with this mandate. Per capita disposal rates are used to determine if a jurisdiction's efforts are meeting the intent of the act.

Assembly Bill 341, Solid Waste Diversion

Effective July 1, 2012, California's Commercial Recycling Bill (AB 341) established a policy goal for California that at least 75 percent of solid waste generated be source-reduced, recycled, or composted by 2020. The bill is intended to reduce GHG emissions by diverting recyclable materials and expand the opportunity for increased economic activity and green industry job creation. AB 341 is a statewide policy goal rather than a city or county jurisdictional mandate.

Local Laws, Regulations, and Policies

Local laws, regulations and policies are listed in Appendix A.

3.19.2 Environmental Setting

Water

The Proposed Project is located within the water service area of the City of Hollister, which is responsible for drinking water systems in the area (City of Hollister 2024, HDR 2017). Sources of drinking water in the city of Hollister are split almost evenly between groundwater wells and local water treatment plants (City of Hollister 2023).

Wastewater

The Proposed Project is located within the service area of the City of Hollister, which is responsible for sewer and wastewater systems in the area (City of Hollister 2024). The City of Hollister also operates the Domestic Water Reclamation Facility and the Industrial Wastewater Treatment Plant (City of Hollister n.d.).

The Proposed Project would install new pipelines to connect to existing wastewater utilities in the area, but would not install or expand any wastewater collection, disposal, or treatment facilities.

Stormwater

The Proposed Project is located within the City of Hollister's stormwater systems service area (City of Hollister 2024). The stormwater sewers in the region are not connected to a treatment

plant or septic system, and the storm sewer systems flow directly into local water bodies (City of Hollister n.d.).

The Proposed Project includes the construction of underground storm-drain containment tanks which would connect to existing stormwater infrastructure to dispose of overflow.

Solid Waste

The City of Hollister's and surrounding unincorporated areas of San Benito County's solid waste is collected through Recology (Recology n.d.). Garbage is taken to the John Smith Road Landfill (San Benito County 2018). This landfill can accept a maximum of 1,000 tons per day but has ceased accepting out of county waste due to overall capacity concerns (County of San Benito 2024). Based on current rates of use, the landfill is estimated to have capacity for in-county waste until 2036 or 2037 (County of San Benito 2024). An expansion to the landfill was proposed in 2021 but did not proceed after the project's environmental impact report was rejected in 2024 and the landfill operator withdrew the project (Monroy 2024). Should no new landfill or landfill expansion be completed before 2036, county solid waste would need to be disposed of in a different county at a higher price (Monroy 2024).

Electricity and Natural Gas

Pacific Gas and Electric Company (PG&E) supplies both gas and electricity to the Hollister area (PG&E 2014a, 2014b). The Proposed Project would install new connections to existing electricity lines in the area. It is further proposed that in the future, an emergency generator would be installed on the project site which would run on diesel.

Communications

Communications service providers within the vicinity of the project site include Spectrum and AT&T.

The Proposed Project would include the construction of fiber optic connections and a communications tower to allow communication between air traffic and ground staff during project operations. It is further proposed that in the future, a communications equipment building would be constructed.

3.19.3 Discussion of Checklist Responses

a. Require the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects—Less than Significant

The Proposed Project involves the relocation of an existing facility at the same property, and demand for utilities would not change substantially. The Proposed Project would build connections to existing utilities in the region and would not include new or expanded water, wastewater treatment, natural gas, or telecommunications facilities. In addition, the Proposed

Project would not result in a substantial increase in water use or wastewater generation as compared to baseline conditions by the existing CAL FIRE facility at the airport. The Proposed Project intends at a future point to incorporate a water tower and a diesel-powered emergency generator. These would be used to supplement municipal connections as needed and would not impact existing utilities.

The Proposed Project would result in an increase in impermeable surface since the project site is presently undeveloped. To address stormwater concerns, the Proposed Project would include underground storm-drain containment tanks to manage stormwater on the project site and would contain stormwater during and after rain events and dispose of overflow via connections to existing stormwater infrastructure.

Overall, it not expected that the Proposed Project would require the relocation or construction of new or expanded facilities beyond those considered as part of the Proposed Project. Therefore, this impact is **less than significant**.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years—Less than Significant

Water use during construction would be minimal and would be primarily for dust control (as needed). This water may be obtained from water trucks or municipal sources and would not necessitate the construction of new or expanded water facilities.

The Proposed Project would increase demand for water at the proposed relocation site as it would be building in an area that is presently undeveloped. However, as it would be relocating an existing development and services from within the same airport and would be retaining the same number of on-site staff, the overall amount of water demand would be relatively similar to baseline and within municipal providers' existing capacity. This impact would be **less than significant**.

c. 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

During construction, the Proposed Project would require water for worker use and for tasks such as dust control. This water could be obtained from municipal sources and would not require the construction or expansion of water facilities.

During operation, the Proposed Project would result in wastewater disposal at the proposed relocation site as it would be building in an area which is presently undeveloped. However, as it would be relocating an existing development and services from within the airport, the overall amount of increased demand for wastewater services would be relatively minor and within the capacity of municipal providers. As a result, impacts would be **less than significant**.

d,e. 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/ Comply with federal, state, and local management and reduction statutes and regulations related to solid waste—Less than Significant

During construction, the Proposed Project is expected to generate less than 750 cy of solid waste. Implementation of BMP-10 (Reuse of Spoils) would encourage the onsite reuse of spoils where practicable (see Table 2-3 in Chapter 2, *Project Description*). Some materials associated with excavation and grading, such as rock and cobble, may be screened, crushed, and spread on site. Spoils and construction materials not being used or retained on site would be hauled off site for disposal or recycling. Waste would be brought to the John Smith Road Landfill. While this landfill is reaching capacity, it is expected that it would still be able to serve the community for another decade or more and it is not expected that the waste generated from the Proposed Project would exceed the capacity of local waste disposal infrastructure. Hazardous waste would be handled in accordance with Title 22 of the CCR, which prescribes measures to appropriately manage hazardous substances, including requirements for storage, spill prevention and response and reporting procedures. See Section 3.9, "Hazards and Hazardous Materials," for further discussion on hazardous wastes.

Because a percentage of the solid waste associated with project construction would be either retained on site or recycled, waste disposal associated with construction of the Proposed Project would be consistent with the California Integrated Waste Management Act, AB 341, which all aim to increase the amount of waste that is diverted from landfills.

The generation of solid waste associated with operation of the facility is expected to be consistent with the amount presently generated. Any increases due to expanded services or extended periods of time staff spend on site would be minimal and would not substantially increase solid waste generation such that local standards or capacity would be exceeded. As such, project operations would not generate solid waste in excess of state or local standards, exceed the capacity of local infrastructure, or impair the attainment of any solid waste goals. Additionally, operation of the Proposed Project would comply with applicable management and reduction regulations related to solid waste. Therefore, this impact would be **less than significant**.

3.20 WILDFIRE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☒	☐	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, 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?	☐	☒	☐	☐
d. 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?	☐	☐	☒	☐

3.20.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies related to wildfire apply to the Proposed Project.

State Laws, Regulations, and Policies

2018 Strategic Fire Plan for California

The Strategic Fire Plan, developed by the State Board of Forestry and Fire Protection, provides direction and guidance to CAL FIRE and its 21 field units. The 2018 plan sets forth the following goals focused on fire prevention, natural resource management, and fire suppression efforts:

a. Improve the availability and use of consistent, shared information on hazard and risk assessment;

b. Promote the role of local planning processes, including general plans, new development, and existing developments, and recognize individual landowner/homeowner responsibilities;

c. Foster a shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as Community Wildfire Protection Plans (CWPPs);

d. Increase awareness and actions to improve fire resistance of man-made assets at risk;

e. Increase awareness and actions to improve fire resistance of man-made assets at risk and fire resilience of wildland environments through natural resource management;

f. Integrate implementation of fire and vegetative fuels management practices consistent with the priorities of landowners or managers;

g. Determine and seek the needed level of resources for fire prevention, natural resource management, fire suppression, and related services; and

h. Implement needed assessments and actions for post-fire protection and recovery.

California's Wildfire and Forest Resilience Action Plan

The Wildfire and Forest Resilience Action Plan (2021) is developed by the Governor's Forest Management Task Force. This plan builds on previous documents with the goal of restoring California's natural environment, improving the safety of communities, and sustaining the economy of rural forested areas. The 2021 plan sets forth the following goals focused on fire prevention, natural resource management, and fire suppression efforts.

1 Increase the Pace and Scale of Forest Health Projects
2 Strengthen Protection of Communities
3 Manage Forests to Achieve the State's Economic and Environmental Goals
4 Drive Innovation and Measure Progress

California Public Resources Code

The Public Resources Code includes fire safety regulations restricting the use of certain equipment that could produce sparks or flames and specifies requirements for the safe use of gasoline-powered tools in fire hazard areas. Contractors must comply with the following requirements during construction activities at any sites with forest-, brush-, or grass-covered land:

a. Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Pub. Res. Code Section 4442).

b. Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Pub. Res. Code Section 4428).

c. On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire-suppression equipment (Pub. Res. Code Section 4427).

d. On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines must not be used within 25 feet of any flammable materials (Pub. Res. Code Section 4431).

Local Laws, Regulations, and Policies

CAL FIRE is the lead agency for the Proposed Project; therefore, local wildfire regulations do not apply to the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only. Local laws, regulations, and policies are listed in Appendix A.

3.20.2 Environmental Setting

The project site is located within an existing open space with minimal existing development or vegetation. Vegetation in the wider area primarily consists of groups of trees, and agricultural areas.

Fire hazard severity zones (FHSZ) are mapped by the Office of the State Fire Marshal and are determined based on factors such as slope, winds, and fuel loading, and are divided into classifications (moderate, high, and very high) (CAL FIRE 2024a).

The project site is located within a local responsibility area (LRA), outside mapped FHSZ zones in both the LRA or SRA (state responsibility area) (CAL FIRE 2024b). The closest mapped FHSZ is a "moderate" SRA approximately 1.2 miles to the west (CAL FIRE 2024b).

3.20.3 Discussion of Checklist Responses

a. Substantially impair an adopted emergency response plan or emergency evacuation plan—Less than Significant with Mitigation

The project site is located on the site of the Hollister Municipal Airport. It is bordered to the north and east by the CVH runway, with the most direct access point to the site being from the adjacent Aerostar Way. However, this access point is closed to the public with a chain link fence. Construction-related vehicles on the airport and navigating on and off airport property could temporarily increase traffic and could result in traffic slowdowns on public roads or impacts to access of the airport itself. However, as discussed in Section 3.17, "Transportation," implementation of Mitigation Measure TR-1 (Prepare and Implement a Construction Traffic Management Plan) shall require that contractors prepare and implement a construction traffic management plan to manage traffic flow during construction. This would manage traffic to ensure adequate emergency responder access, by methods such as signage, and coordinating construction activities to ensure that one travel lane remains open at all times, unless flaggers or temporary traffic controls are in place, to provide emergency access. Given the temporary nature of the project construction activities, and that the new Air Attack Base facilities are intended to improve emergency response capacity, the Proposed Project is not expected to

have long-term impacts on emergency response or evacuation plans. Therefore, this impact would be **less than significant with mitigation.**

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire—Less than Significant with Mitigation

The Proposed Project would involve relocating existing the existing Air Attack Base facilities approximately 0.25 mile to a different location on the Hollister Municipal Airport, as well as the addition of new buildings and infrastructure to better support the existing operations.

During operations, while the Proposed Project would not increase the total number of staff members, it would involve the construction of a 32-room dormitory, potentially increasing the amount of time staff members spend on site. However, project construction and operation would take place in an urban area in the jurisdiction of the City of Hollister Fire Department (Vankin 2021) so would not place people or structures in areas without fire protection. Specifically, there is an existing fire station located nearby, approximately 0.15 mile to the west of the project site. Furthermore, the conditions regarding slope, prevailing winds, and other wildfire risk factors would be largely identical between the old and proposed Air Attack Base location.

There is a potential for an accidental ignition of a wildland fire during construction activities, particularly during the summer when fire danger is the highest. Use of vehicles and equipment for construction activities could ignite a fire through generation of sparks or heat. **Mitigation Measure WF-1 (Implement Fire Suppression Measures during Construction)** would be implemented to reduce potential impacts by requiring equipment with internal combustion engines be equipped with spark arrestors. Furthermore, during the high fire danger period (April 1 to December 1), all work crews would take additional precautions around flammable materials and have fire suppression equipment available. Therefore, this impact would be **less than significant with mitigation**.

Mitigation Measure WF-1: Implement Fire Suppression Measures during Construction

CAL FIRE shall require the following measures to be implemented during construction activities at the project site:

- All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors.
- During the high fire danger period (April 1 through December 1), work crews will:
  - Have appropriate fire suppression equipment available at the work site.
  - Keep flammable materials, including flammable vegetation slash, at least 10 feet away from any equipment that could produce a spark, fire, or flame.
  - Not use portable tools powered by gasoline-fueled internal combustion engines within 25 feet of any flammable materials unless a round-point

shovel or fire extinguisher is within immediate reach of the work crew (no more than 25 feet away from the work area).

c. Require the installation or maintenance of associated infrastructure (such as roads, 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—Less than Significant with Mitigation

The Proposed Project would involve the construction of new buildings and services that is presently largely undeveloped open space. These would require new connections to power lines and other utilities. Construction activities occurring during the dry season would have a potential for accidental ignition wildland fire due to operating construction equipment. Mitigation Measure WF-1 would be implemented to reduce potential impacts, requiring that on-site fire suppression equipment be available, spark arrestors are present on all equipment with internal combustion engines, and additional precautions are taken on high fire danger days. Furthermore, there is an existing fire station located nearby, approximately 0.15 mile to the west of the project site. Therefore, installation of or maintenance of infrastructure would not substantially exacerbate fire risks. This impact would be **less than significant with mitigation.**

d. 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—Less than Significant

The Proposed Project would relocate existing facilities to a new location approximately 550 feet west of the current facilities. The project site is at a similar elevation to the location of the existing facilities, and the entire site is fairly level, and there are no significant waterways in the project vicinity.

Project construction would include clearing and grubbing, fill placement, and other related tasks which may contribute to erosion. As discussed in Chapter 2, *Project Description*, Table 2-3, project BMPs include BMP-2 (Erosion and Sediment Control) which outlines measures to prevent erosion and protect topsoil during project construction, and ensure soils are stabilized during operation, and BMP-3 (Fill, Spoils and Stockpiled Materials) which requires fill and excavated spoils to be isolated with erosion control measures such as silt fences.

During project operation, on-site coverage and uses would be in keeping with existing development in the area, and would include stormwater capture modules to redirect runoff underground and then to existing stormwater infrastructure in the area. It would not include features that would significantly increase the risk of people or structures to flooding, landslides, post-fire slope instability or drainage changes. Therefore, this impact would be **less than significant**.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, threaten to eliminate a plan or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.21.1 Discussion of Checklist Responses

a. Effects on environmental quality, fish or wildlife, and historic resources—Less than Significant with Mitigation

Degrade Quality of Environment

As described in Sections 3.1 through 3.20 of this environmental checklist, the Proposed Project has the potential for significant impacts on various environmental resources that could degrade the quality of the existing environment. As discussed in Section 3.3, project construction could increase the risk of Valley Fever cases given that Monterey County has some of the highest incidence rates in the state. Mitigation Measure AQ-1 would reduce impacts to less than significant with mitigation by requiring that prior to the start of construction, CAL FIRE or its contractors draft a Valley Fever Management Plan (VFMP), consult with CDPH and the Monterey County Department of Public Health regarding Valley Fever best management practices, and implement all such feasible measures recommended by these agencies.

As discussed in Section 3.7, project construction could directly or indirectly destroy a unique paleontological resource. Mitigation Measure GEO-1 would reduce the impact to less than significant with mitigation by requiring crew members to participate in a training on paleontological resources prior to ground disturbing activities and requiring stop work in case of accidental discovery.

As discussed in Section 3.9, project construction could create a significant hazard through transport, use, or disposal of hazardous materials or the accidental but reasonably foreseeable upset and accident conditions that could release hazardous materials. Mitigation Measure HAZ-1 would reduce this impact to less than significant with mitigation by requiring measures to reduce risk of release. In addition BMP-7 (Dust Management Controls and Air Quality Protection) would reduce the impact to less than significant with mitigation by controlling fugitive dust emissions. Further, project construction could interfere with emergency access. Mitigation Measure TR-1 would reduce this measure to less than significant with mitigation by providing traffic control at the project access road that could allow emergency vehicles access through the area and to the site.

As discussed in Section 3.10, project construction could degrade water quality through accidental release of hazardous materials into the water or through stormwater runoff. Implementation of Mitigation Measure HAZ-1 would reduce the impact to less than significant with mitigation by ensuring that hazardous materials releases during construction are avoided/minimized to the extent feasible, damage to surface or groundwater quality is minimized in the event such releases do occur, and that there are no conflicts to the Central Coast Basin Plan caused by the release of construction-related pollutant discharges.

As discussed in Sections 3.9 and 3.20, construction could increase risk of wildfire or wildfire-related risks that could expose project occupants to pollutant concentrations or the spread of a wildfire. Implementation of Mitigation Measure WF-1 would reduce the impact to less than significant with mitigation by requiring the inclusion of spark arrestors and additional fire suppression precautions during the high fire danger period, as well as putting limits on how close flammable materials can be kept from equipment that could produce a spark, fire, or flame. Additionally, the implementation of Mitigation Measure TR-1 would reduce the potential for impacts to emergency response or evacuation plans during construction which could limit emergency responder access in the case of emergency to a level that is less than significant with mitigation.

Wildlife Habitat and Populations; Rare and Endangered Species

As discussed in Section 3.4, the project site and immediate vicinity could potentially support habitat for seven special-status wildlife and invertebrate species. Although they are not expected to occur, Crotch's bumble bee, California tiger salamander, western spadefoot, western burrowing owl, Swainson's hawk, white-tailed kite, golden eagle, and American badger could not be ruled out as having at least some potential to occur within the project area. Project activities that remove, trample, or crush individual special-status species; disturb burrows; or create visual distractions during the breeding season could disturb special-status wildlife and invertebrate species as well as nesting birds and burrowing owls within the project site and vicinity. Therefore, this impact could have the potential to significantly affect biological resources and habitats. Implementation of Mitigation Measures BIO-1 through BIO-8 would reduce these impacts to less than significant with mitigation by requiring a worker

environmental training, the delineation and limitation of work limits with fencing or flagging, pre-activity surveys, and monitoring during winter rain events and ground disturbance. With the implementation of Mitigation Measures BIO-1 through BIO-8, impacts to candidate, sensitive, or special-status species are anticipated to be less than significant with mitigation.

California History and Prehistory

As described in Section 3.5, project construction activities would include ground-disturbing activities. The Proposed Project has the potential for significant impacts related to unknown archaeological resources, human remains, and tribal cultural resources. Therefore, this impact would have the potential to significantly impact cultural resources. Implementation of Mitigation Measures CR-1 and CR-2 would reduce the impact to less than significant with mitigation by requiring work to stop in case of inadvertent discovery, and proper documentation as appropriate; erecting exclusionary fencing in case of any such discovery; and halting work and contacting the county coroner in case of discovery of human remains.

Overall, effects on environmental quality, fish or wildlife, and historic resources would be mitigated to a less-than-significant level by the implementation of the mitigation measures summarized above. The Proposed Project would have an impact that is **less than significant with mitigation** with regards to degrading the environment, harming wildlife habitats, reducing fish or wildlife populations, threatening endangered species, or destroying important historical or prehistoric sites.

b. Cumulative impacts—Less than Significant

A cumulative impact refers to the combined effect of "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355). Cumulative impacts reflect "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" (CEQA Guidelines Section 15355[b]).

Lead agencies may use a "list" approach to identify related projects or may base the identification of cumulative impacts on a summary of projections in an adopted general plan or related planning document (CEQA Guidelines Section 15130[b]), also known as the "projection" approach. This document utilizes a combination of the list and projection approaches. Project contributions to localized cumulative impacts (air quality, biological resources, noise and vibrations) are evaluated using the list approach, while project contributions to regional cumulative impacts (GHG emissions and traffic) are evaluated using the projection approach.

Projects with the potential to contribute to the same cumulative impacts as the Proposed Project would likely be within close geographic proximity to the project area, except for certain resources (e.g., air quality, GHG emissions). The San Benito County Planning and Land Use Division website (San Benito County 2024) and CEQAnet (Governor's Office of Planning and Research 2024a) were consulted to determine projects that could combine with the Proposed Project to yield cumulative impacts. Planned projects in the general area that may combine with the Proposed Project to produce a cumulative impact include the following:

- **Hollister Municipal Airport Runway 6 Safety Project:** The project involves constructing a new taxiway and improving an existing taxiway to meet FAA regulations. The work includes demolishing and removing approximately 4.8 acres of paved taxiway west of Runway 6 and constructing a new 0.5-acre perpendicular taxiway connecting Runway 6 and the southern taxiway (Governor's Office of Planning and Research, 2024b).
- **State Route 25 Corridor Improvement Project:** The project is an initiative aimed at enhancing a section of State Route 25 to improve traffic flow, safety, and regional connectivity. The project typically involves road widening, intersection upgrades, and the installation of new infrastructure such as bridges or overpasses. The improvements are designed to accommodate increasing traffic volumes, reduce congestion, and support economic growth in the area. Construction is set to begin in summer of 2030 (Caltrans 2024).
- **West Hills Water Treatment Plant:** The project aims to upgrade and expand the existing water treatment facilities in the West Hills region. The project involves constructing new infrastructure and upgrading current systems to improve the treatment capacity, efficiency, and reliability of the water supply. Key components include new filtration systems, storage tanks, pumping stations, and enhanced water quality monitoring systems. The project aims to ensure the delivery of safe, clean drinking water to local communities, meet increasing demand, and address environmental and regulatory standards. It also focuses on improving operational efficiency and sustainability (Governor's Office of Planning and Research, 2024c).

These projects may have construction activities occurring at the same time as the Proposed Project. While not every possible cumulative project is likely to be listed, the list of cumulative projects is believed to be representative of the types of impacts that would be generated by other projects related to the Proposed Project. The cumulative impact evaluation assumes that the impacts of past and present projects are represented by baseline conditions, and cumulative impacts are considered in the context of baseline conditions alongside reasonably foreseeable future projects.

The projects listed above are in the same geographic area as the Proposed Project and may affect similar types of resources (e.g., air quality; transportation/traffic). While the Proposed Project could contribute to cumulative impacts in areas like air quality, biological resources, cultural resources, greenhouse gases, hazards, noise, transportation, and tribal cultural resources during construction, its short duration and compliance with BMPs outlined in Chapter 2, *Project Description*, as well as the mitigation measures described in item a., "Effects on environmental quality, fish or wildlife, and historic resources," would limit its contribution to be less than considerable. Furthermore, the other projects identified above would be required to adhere to regional laws and regulations, and each would be required to reduce or mitigate relevant significant impacts. Therefore, the Proposed Project would result in **a less-than-significant** cumulative impact.

c. Substantial adverse effects on human beings—Less than Significant with Mitigation

As discussed in Section 3.3, project construction could create a hazard to human health by increasing dust particles in the air during excavation and grading. The implementation of BMP 7 (Dust Management Control and Air Quality Protection) would reduce this impact to less than

significant with mitigation through reducing fugitive dust during construction. In addition, project construction could expose sensitive receptors to substantial air pollutant concentrations, specifically Valley Fever, through ground disturbance. Mitigation Measure AQ-1 would reduce this impact to less than significant with mitigation by requiring preparation of and adherence to a Valley Fever Management Plan.

As discussed in Section 3.9, the routine transport, use, or disposal of hazardous materials could create a significant hazard to the public as the Proposed Project would require the use of materials such as oil and fuel. The implementation of Mitigation Measure HAZ-1 would limit the potential for negative impacts to the public by ensuring that hazardous materials releases during construction that could cause harm are avoided/minimized to the extent feasible.

As discussed in Sections 3.9 and 3.20, project construction could increase risk of wildfire, which in turn could potentially increase the demand for fire protection services in the area. Implementation of Mitigation Measure WF-1 would reduce the impact to less than significant with mitigation by requiring spark arrestors on all equipment with internal combustion engines.

As discussed in Section 3.17, project construction has the potential to interfere with the flow of traffic and/or airport access, resulting in a traffic hazard and impeding emergency access. Implementation of Mitigation Measure TR-1 would reduce the impact to less than significant with mitigation by requiring preparation of and adherence to a construction traffic management plan.

In summary, all the potentially adverse effects on human beings identified in this IS/MND would be avoided or reduced by BMPs incorporated into the Proposed Project or would be mitigated to a less-than-significant level by implementation of measures identified in this document. Collectively, no substantial adverse effects on human beings would result and the impact would be **less than significant with mitigation**.

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None.

Chapter 2. Project Description

None.

Chapter 3. Environmental Checklist

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Chapter 4. Determination

None.

Appendix A

Local Plans and Policies

Appendix A
Local Plans and Policies

This appendix includes policies from general plan policies related to Hollister Air Attack Based Relocation Project, and incorporated jurisdictions in the project area.

General Plans are long-range comprehensive plans developed for cities and counties that govern growth and development. The project area is located in San Benito County. Although San Benito County includes many cities and towns, this analysis focuses on those municipalities directly affected by proposed project activities. The following section reviews key policies in the San Benito County 2035 General Plan (2015).

San Benito County

The following policies contained in the San Benito County 2035 General Plan are applicable to the Proposed Project.

Chapter 2 Vision and Guiding Principles

4. Land use and Community Character

Ensure new development complements and preserves the unique character and beauty of San Benito County.

14. Transportation and Infrastructure

Encourage future growth near existing transportation networks such as the major roadways, State highways, airports, rail corridors, and other major transportation routes.

Chapter 3 Land Use Element

LU-1.8 Site Plan Environmental Content Requirements

The County shall require all submitted site plans, tentative maps, and parcel maps to depict all environmentally sensitive and hazardous areas, including: 100-year floodplains, fault zones, 30 percent or greater slopes, severe erosion hazards, fire hazards, wetlands, and riparian habitats. (RDR)

LU-1.9 Airport Land Use Coordination and Consistency

The County shall coordinate planning and zoning with the San Benito County Airport Land Use Commission and ensure that all land uses and regulations within the Hollister and Frazier Airports areas of influence are consistent with the adopted San Benito County Airport Land Use Compatibility Plan.

Chapter 7 Public Facilities and Services Element

PFS-1.12 New Development Requirements

The County shall require new development, incompliance with local, State, and Federal law, to mitigate project impacts associated with public facilities and services, including, but not limited to, fire, law enforcement, water, wastewater, schools, infrastructure, roads, and pedestrian and bicycle facilities through the use of annexation fees, connection fees, facility construction/expansion requirements, or other appropriate methods.

PFS-7.1 Adequate Capacity

The County shall ensure that there is adequate capacity within the solid waste system for the collection, transportation, processing, recycling, and disposal of solid waste to meet the needs of existing and projected development. (MPSP)

PFS-7.2 Transfer Stations

The County shall provide adequate transfer station facilities that meet local demands, including recycling facilities, and avoid conflicts with surrounding uses. (MPSP)

PFS-7.5 Waste Diversion

The County shall require waste reduction, recycling, composting, and waste separation to reduce the volume and toxicity of solid wastes sent to landfill facilities and to meet or exceed State waste diversion requirements of 50 percent. (RDR)

PFS-7.6 Construction Materials Recycling

The County shall encourage recycling and reuse of construction waste, including recycling materials generated by the demolition of buildings, with the objective of diverting 50 percent to a certified recycling processor. The County shall encourage salvaged and recycled materials for use in new construction. (RDR)

PFS-12.5 Crime Prevention through Environmental Design

The County shall include the Sheriff Department in the review of development projects, specifically for residential subdivision and commercial development, to adequately address crime and safety, and promote implementation of Crime Prevention through Environmental Design principles.

PFS-13.9 Fire Safety Standard Compliance

The County shall ensure that all proposed developments are reviewed for compliance with the California Fire Code and other applicable State laws.

Chapter 8 Natural and Cultural Resources Element

NRC-2.8 Pre-Development Biological Resource Assessment

The County shall require the preparation of biological resource assessments for new development proposals as appropriate. The assessment shall include the following: a biological resource inventory based on a reconnaissance-level site survey, and an analysis of anticipated project impacts to: potentially occurring special-status species (which may require focused special-status plant and/or animal surveys); an analysis of sensitive natural communities; wildlife movement corridors and nursery sites on or adjacent to the project site; potentially jurisdictional wetlands/waterways; and locally protected biological resources such as trees. The assessment shall contain suggested avoidance, minimization, and/or mitigation measures for significant impacts to biological resources.

NCR- 2.10 Invasive Species

The County shall require that new developments avoid the introduction or spread of invasive plant species during construction by minimizing surface disturbance, seeding and mulching disturbed areas with certified weed-free native mixes, and using native or noninvasive species in erosion control plantings.

NRC-7

To protect, preserve, and enhance the unique cultural and historic resources in the county.

NRC-7.3 Assemble Information.

The County shall cooperate with the Historical Society and other organizations to assemble information on historic areas of the county that should be preserved. (PSR/IGC/JP)

NRC-7.5 Preservation of Structures.

The County shall require development proposals that would remove structures 100 years or older to demonstrate why preservation of the structures and integration of the structures into the development proposal is inappropriate or infeasible. (RDR)

NRC-7.6 Historic Consultant

The County shall retain an historic consultant at the developer's expense to evaluate the historic merits of existing structures, make recommendations for the new development, and, if necessary, to review building elevations for new development. (RDR)

NRC-7.7 Resource Identification and Preservation

The County shall maintain a register of historic properties that will be used during the design review process to protect the character of historic communities in the county. (PSR)

NRC-7.9 Tribal Consultation

The County shall consult with Native American tribes regarding proposed development projects and land use policy changes consistent with the State's Local and Tribal Intergovernmental Consultation requirements. (RDR/IGC)

NRC-7.11 Prohibit Unauthorized Grading

The County shall prohibit unauthorized grading, collection, or degradation of Native American, tribal, archaeological, or paleontological resources, or unique geological formations. (RDR)

NRC-7.12 Archaeological Artifacts

The County shall require an archaeological report prior to the issuance of any project permit or approval in areas determined to contain significant historic or prehistoric archaeological artifacts and when the development of the project may result in the disturbance of the site. The report shall be written by a qualified cultural resource specialist and shall include information as set forth in the county's archaeological report guidelines available at the County Planning Department. (RDR)

Chapter 9 Health and Safety Element

HS-3.1 Earthquake Resistant Design

The County shall require earthquake resistant designs for all proposed critical structures such as hospitals, Sheriff substations, fire stations, emergency communication centers, private schools, high occupancy buildings, bridges, and dams. (RDR).

HS-3.2 Subsidence or Liquefaction

The County shall require that all proposed structures, utilities, or public facilities within recognized near-surface subsidence or liquefaction areas be located and constructed in a manner that minimizes or eliminates potential damage. (RDR)

HS-3.6 Unstable Soils

The County shall require and enforce all standards contained in the current California Building Code related to construction on unstable soils, and shall make a determination as to site suitability of all development projects during the building permit review process. The County shall not approve proposed development sited within areas of known or suspected instability until detailed area studies are completed that evaluate the extent and degree of instability and its impact on the overall development of the area. (RDR)

HS-5.3 Early Coordination with the Air Quality Control District

The County shall notify and coordinate with the Monterey Bay Unified Air Pollution Control District when industrial developments are proposed within the county to ensure applicants comply with applicable air quality regulations and incorporate design features and technologies to reduce air emissions. (RDR/IGC)

HS-5.4 PM10 Emissions from Construction

The County shall require developers to reduce particulate matter emissions from construction (e.g., grading, excavation, and demolition) consistent with standards established by the Monterey Bay Unified Air Pollution Control District. (RDR)

Chapter 9 Health and Safety Element

HS-8.3 Construction Noise

The County shall control the operation of construction equipment at specific sound intensities and frequencies during day time hours between 7:00 a.m. and 6:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on Saturdays. No construction shall be allowed on Sundays or federal holidays. (RDR)

Other Local Policies

San Benito County Airport Land Use Compatibility Plan

This Airport Land Use Compatibility Plan (Plan) is intended to safeguard the general welfare of the inhabitants within the vicinity of the Frazier Lake Airpark (which includes the Hollister Municipal Airport). This Plan is also intended to ensure that surrounding land uses do not affect the airport's continued operation for the next twenty-year planning period. Specifically, the Plan seeks to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable airspace.

4.3.2 Noise Compatibility

N-3 Noise impacts shall be evaluated according to the Aircraft Noise Contours presented on Figure 4.

N-4 No residential or transient lodging construction shall be permitted within the 60 dB CNEL contour boundary unless it can be demonstrated that the resulting interior sound levels will be less than 45 dB CNEL and there are no outdoor patios or outdoor activity areas associated with the residential portion of a mixed-use residential project of a multi-unit residential project. (Sound wall noise mitigation measures are not effective in reducing noise generated by aircraft flying overhead.)

4.3.5.1 Policies

S-4 Storage of fuel or other hazardous materials shall be prohibited in the Runway Protection Zone. Above ground storage of fuel or other hazardous materials shall be prohibited in the Inner Safety Zone and Turning Safety Zone. Beyond these zones, storage of fuel or other hazardous materials not associated with aircraft use should be discouraged.

The Hollister 2005 General Plan

Chapter 2 Land Use and Community Design Element

GOAL LU2 Ensure that public utilities and infrastructure adequately meet the demand for services placed on them by existing and future commercial and residential users.

LU2.2 Fiscally Sound Development Evaluate the fiscal impact of projects as part of the development review process to assure that new development does not reduce standards or unduly increase the burden on existing residents.

Chapter 5 Community Services and Facilities Element

CSF1.2 New Development Requirements for Public Services

Require new development applications to identify the impacts that the proposed development would have one the provision of public services. And approve those applications that can mitigate impacts or contribute a proportional fair share so that local public services can be maintained at an acceptable level.

CSF1.7 Development Review Criteria for Public Services

Prior to granting approval, evaluate each new development in terms of the following criteria:

1. Would the proposed development share a common border with a property that has already been developed?

2. Would the proposed development be adequately served by infrastructure (water, sewer, streets, schools, parks, etc.), which is already in place or mitigated?

3. Would the proposed development be located within the existing service areas of local service providers (fire protection, police protection, solid waste disposal, schools, etc.), and not result in a reduction in their current capabilities?

Policy CSF3.1: Adequate Drainage Facilities.
Require project developers to provide adequate storm drains for storm water runoff. Review all proposed development projects to ensure that adequate provisions have been included to accommodate peak flows and that projects will not significantly impact downstream lands, and will avoid impacts on riparian vegetation. Ensure that water quality standards are met for existing users and future development.

Policy CSF3.2: Erosion and Sediment Control.
Require project developers to implement suitable erosion control measures.

Policy CSF3.3: Local, State and Federal Standards for Water Quality.
Continue to comply with local, State and Federal standards for water quality.

Policy CSF3.5: Infiltration Areas.

Require new development to identify sites which may be used for vegetated swales or strips, infiltration, media infiltration, water-oil separators, wet ponds, constructed wetlands, extended detention basins and multiple systems which may enhance water quality.

Policy CSF 3.7: Pollution from Urban Runoff.
Address non-point source pollution and protect receiving waters from pollutants discharged to the storm drain system by requiring Best Management Practices. This would include:

1. Support alternatives to impervious surfaces in new development, redevelopment, or public improvement projects to reduce urban runoff into storm drain system and creeks;

2. Require that site designs work with the natural topography and drainages to the extent practicable to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems; and,

3. Where feasible, use vegetation to absorb and filter fertilizers, pesticides and other pollutants.

Policy CSF 4.11 Waste Reduction and Recycling
Encourage efforts to promote recycling, such as encouraging businesses to recycle building and other materials, promoting composting by restaurants, institutions and residences, and supporting programs to promote recycling. Encourage residential, commercial and industrial concerns to evaluate and reduce their waste streams and to participate in waste exchanges and used goods resale programs.

Policy CSF4.7 Police Services

Ensure that development within the Hollister Planning Area does not exceed the capability of the Hollister Police Department and the San Benito County Sheriff's Department to provide an adequate level of police protection.

Policy CSF4.8 Fire Safety

Ensure that development within the Hollister Planning Area does not exceed the capability of the Hollister Fire Department and the San Benito County Fire Department to provide an adequate level of fire protection.

Policy CSF4.12 Requirements for Fire Safety

Ensure that all new development will be adequately designed to minimize risks to life and property through the implementation of the Fire Protection Master Plan. New development will be protected from fire hazards through the provision of peak load water supply systems capable of providing the flow required for fire suppression, through the design of roads with adequate widths and turning radii, and through adequate separation between buildings, prior to project approval.

Policy CSF.II Require Fire Agency Review

Require the appropriate fire protection agency to review all development proposals within the Hollister Planning Area to verify that the peak-load water supply system will provide an adequate flow of water for fire suppression, and to ensure that there are adequate road widths and turning radii, and adequate separation distances between buildings to meet the fire protection standards established in the Fire Protection Plan.

Policy CSF.KK Require Law Enforcement Review

Require the appropriate law enforcement agency to review all development proposals within the Hollister Planning Area to ensure that crime prevention concerns are considered.

Chapter 6 Open Space and Agriculture Element

Policy OS1.1 Open Space Preservation

Open Space Preservation Retain and protect open space areas whenever practical through the protection of prime farmlands, the prevention of new development in areas subject to natural hazards, that serve as wildlife habitat or as visual assets for the community, and where the development of additional parks and trails is possible. Open space areas can also function as connections between neighborhoods, for example with the creation of pathways in environmentally appropriate areas.

Policy OS1.6 Utilities in Open Space

Utilities in Open Space Discourage utilities in open space areas. Necessary utilities in open space should be located and designed to minimize harm to the area's environmental and visual quality.

Chapter 7 Natural Resources and Conservation Element

NRC 1.2 Protection of Endangered Species Habitat

Identify and protect the habitats of endangered species which may found within the Hollister Planning Area, in cooperation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, through the review all development proposals for compliance with regulations established by the U.S. Fish and Wildlife Service and the California Department of Fish and Game as they apply to the protection of endangered species and their habitats.

NRC 1.7 Specialized Surveys for Special Status Species

Require specialized surveys for special status species for those projects that have been proposed in areas that contain suitable habitat for such species. All surveys should take place during appropriate seasons to determine nesting or breeding occurrences.

Chapter 8 Healthy and Safety Element

HS1.1 Location of Future Development.

Permit development only in those areas where potential danger to the health, safety, and welfare of the residents of the community can be adequately mitigated, including development which would be subject to severe flood damage or geological hazard due to its location and/or design. Development also should be prohibited where emergency services, including fire protection, cannot be provided.

HS1.2 Safety Consideration in Development Review

Safety Considerations in Development Review. Require appropriate studies to assess identified hazards and assure that impacts are adequately mitigated.

HS1.3 Coordination with San Benito County and Other Agencies on Safety Matter

Cooperate with the County of San Benito and with other government agencies in all matters related to safety hazardous waste management and emergency planning.

HS1.4 Seismic Hazards

Assure existing and new structures are designed to protect people and property from seismic hazards. Review all development proposals for compliance with the Alquist-Priolo Earthquake Fault Zoning Act and the Uniform Building Code as a way to reduce the risk of exposure to seismic hazards for those who will be living and working within the Hollister Planning Area.

HS1.5 Geotechnical and Geologic Review

Require all geologic hazards be adequately addressed and mitigated through project development. Development proposed within area of potential geological hazards shall not be endangered by, nor contribute to the hazardous conditions on the site or on adjoining properties.

HS1.6 Engineering Tests for Geologic Conditions

Require engineering tests for those development projects which may be exposed to impacts associated with expansive soils, so that building foundation footings, utility lines, roadways and sidewalks can be designed to accept the estimated degree of soil contraction, expansion and settlement, according to the standards of the Uniform Building Code.

HS1.7 Design of Safe Structures and Utilities

Require new roads, bridges and utility lines are constructed to accommodate possible fault movement and withstand the expected ground motion induced during an earthquake.

HS1.9: Flood Hazards

Review all development proposals to verify that either no portion of the proposed development lies within the 100-year floodplain or that the applicant has taken adequate measures to eliminate the risk of flood damage in a 100-year storm consistent with the City of Hollister Flood Damage Prevention Ordinance as amended from time to time.

HS1.13 Hazardous Waste Management

Support measures to responsibly manage hazardous waste to protect public health, safety and the environment, and support state and federal safety legislation to strengthen for hazardous materials transport.

HS1.14 Hazardous Material Storage and Disposal

Requires proper storage and disposal of hazardous materials to prevent leakage, potential explosions, fires, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances especially at the time of disposal. Provide the public industry, agriculture and local government with the available information needed to enable them to take rational and cost-effective action to minimize recycle, treat dispose of or otherwise manage hazardous wastes within the Hollister Planning Area.

HS2.1 High Occupancy Structure

High-occupancy structures (such as schools, hospitals, office buildings and apartments) or critical emergency facilities (such as fire and police stations, emergency relief storage facilities, and water storage tanks) should not be located within an active fault's "zone of potential surface deformation." In addition, high-occupancy structures should be designed or redesigned to protect human life to the highest degree possible during the "maximum probable even" of seismic activity. High occupancy structures should also have emergency plans approved by the City.

HS2.2 Emergency Services Facilities

The structures designated to house local command control of emergency/disaster services should be designed or redesigned to withstand a "maximum probable event" to remain operational. Secondary facilities should be identified and equipped as back-up.

HS2.3 Hazard Awareness

Publicize disaster plans and promote resident awareness and caution regarding hazards, including soil instability, earthquakes, flooding, and fire.

City of Hollister Code of Ordinance

The City of Hollister Code of Ordinances sets out the adopted provisions, laws and regulations for the City. It also includes the zoning ordinance for the city, and regulations for many topics including lighting.

City of Hollister Zoning Map and Code of Ordinances

The City of Hollister Zoning Map classifies the Project Site as "Airport". General development standards for the Industrial Zoning districts are in effect, with additional development standards regarding issues including air emissions, electronic interference, glare, ground vibration, traffic patterns, noise, lighting, and height. For example, no new construction would be permitted which exceeds FAR Part 77 regulations, or which produces illumination or glare which would interfere with a pilot's ability to navigate.

Hollister Municipal Airport Master Plan

The Hollister Municipal Airport Master Plan was written to identify and plan for future needs, including developing conceptual land use plans for all areas of airport property. In Chapter 4, a number of development alternatives are considered, and incorporate the possible development of a new Air Attack Base at the west parallel taxiway.

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Appendix B

Air Quality and Greenhouse Gas Calculations

Table: 1 Operational Emissions
CalFire Hollister Air Attack Base

Operational Source	ROG	NO_X	CO	PM_{10} EXHAUST	PM_{10} FUGITIVE	$PM_{2.5}$ EXHAUST	$PM_{2.5}$ FUGITIVE
Helicopters	15.52	77.49	18.70	2.13	23.15	2.13	23.15
Area Sources	1.65						
Energy	0.02	0.43	0.29	0.03		0.02	
Stationary Sources	2.2	10.1	6.08	0.43		0.43	
Blending Dust Collector				3.09		3.09	
Total	19.39	88.02	25.07	5.68	23.15	5.67	23.15

1. Area Sources, Energy, and Stationary Sources are from CalEEMod.

Table:2 Helicopter Combustion Emissions
CalFire Hollister Air Attack Base

	Activity[2]				Emissions (lb/day)[3]							Emissions (tons/project or MT/project)[4]						
Helicopter Type[1]	Number of Days	Hours per Day	Number of LTOs per Day	Fuel kg/day	CO	NO_X	ROG	PM_{10}	$PM_{2.5}$	CO_2	Fuel MT/project	CO	NO_X	ROG	PM_{10}	$PM_{2.5}$	CO_2
Sikorsky S70	200	7	7	3,264	18.70	77.49	15.52	2.13	2.13	4,110.15	652.72	1.87	7.75	1.55	0.21	0.21	372.87

Notes:

1. Sthe helicopters would operate for 7 hours per day for 200 days for training.
2. The landing and takeoff (LTO) sequence emissions are multiplied with the number of events per day. The cruising emission factors is multiplied by the total hours per day minus takeoff and landing time. IT was assumed that there would be an LTO sequence once per hour.
4. Criteria pollutants are in terms of tons (CO, NO_x, ROG, PM_{10} and $PM_{2.5}$) and GHG pollutants (CO_2, CH_4, N_2O and CO_2e)are in metric tonnes (MT).

Table 3: Helicopter Fuel Consumption and Emission Factors

				SHP Correction	Climbout Engine Power	Climb Out Operating	Climbout Fuel Consumption	Climbout Emission Factors grams pollutant per kg fuel[2,3]					Cruising Fuel	Cruising Emission Factors g/hour[2]					
Helicopter Type	Engine Name	Engine Max SHP	Number of Engines	Factor	Percentage[1]	Time (seconds)[1]	kg/second[2,3]	CO EF	NOX EF	HC EF	PM EF	CO2	Consumption kg/hr[2]	CO EF	NOX EF	HC EF	PM EF	CO2
Sikorsky S70	GE CT7-8A	2740	2	1622	0.85	887	0.09	2.45	11.09	2.04	0.30	3,155.00	508	1,336	5,432	1,108	150	3,155
LTO Cycle Values							84	205	928	171	25	263,956						

Notes:
1. The ADET model only uses Climbout of the LTO sequence for helicopters. Climb out is assumed to be at 85% power and for 887 seconds. (FAA 2016).

2. Fuel consumption and emission factors were based on detailed engine values from FOCA as this engine is not available in the ICAO database. HC emission factors were converted to ROG emission factors based on the default AEDT conversion factors for turbine engines. FOCA. 2015. Guidance on the Determination of Helicopter Emissions, Edition 2, December. https://www.bazl.admin.ch/bazl/en/home/specialists/regulations-and-guidelines/environment/pollutant-emissions/aircraft-engine-emissions/guidance-on-the-determination-of-helicopter-emissions.html.
3. The LTO emissions associated with climbout were used rather than the whole LTO cycle to be consistent with ADET methods. The percentage of power in climbout was adjusted from the FOCA default of 66% to the ADET default of 85%

Table 4: Fugitive Dust Emissions from Helicopters.

Number of LTOs per day	PM EF kg PM/LTO	Daily PM (lb/day)	Total Project PM (tons)
7	1.5	23.15	2.31

Notes:
1. The emission factor for fugitive dust for helicpoters is based on Gillies et al. 2007 which states that 0.5 kg per take off and 1 kg for landing.

Table: 5 Dust Collecter Emissions
CalFire Hollister Air Attack Base

Emission Factor	Airflow Rat	Emissions
Grains/dscf	scfm	(lb/day)
0.01	1500	3.09

1. A pound is 7000 grains.
2. scfm = standard cubic feet per minute dscf = dry standard cubic feet

Hollister CalFIRE Funded Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Hollister CalFIRE Funded
Construction Start Date	10/1/2027
Operational Year	2029
Lead Agency	CalFire
Land Use Scale	Project/site
Analysis Level for Defaults	Statewide
Windspeed (m/s)	3.60
Precipitation (days)	15.6
Location	36.88969167054219, -121.40945997961026
County	San Benito
City	Hollister
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3102
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	66.4	1000sqft	1.52	0.00	0.00	0.00	—	for vehicles and planes

Apartments Low Rise	17.0	Dwelling Unit	1.06	8,844	0.00	0.00	34.0	Dormitory
Government Office Building	4.52	1000sqft	0.10	4,520	0.00	0.00	—	OPS
General Light Industry	6.72	1000sqft	0.15	6,720	0.00	0.00	—	Retardant Plant
Unrefrigerated Warehouse-No Rail	28.5	1000sqft	0.65	28,503	0.00	0.00	—	Wharehouse, hangers, tower, covered plane
Other Non-Asphalt Surfaces	353,969	1000sqft	8.13	8.13	0.00	0.00	—	concrete lots

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Energy	E-2	Require Energy Efficient Appliances

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.76	1.49	10.0	18.9	0.03	0.31	45.5	45.8	0.29	4.73	5.02	—	4,248	4,248	0.14	0.16	4.99	4,305
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	100.0	99.9	29.0	32.2	0.08	1.17	51.3	52.5	1.08	7.41	8.49	—	9,776	9,776	0.38	0.25	0.16	9,828

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.24	5.08	6.75	12.2	0.02	0.21	31.1	31.3	0.19	3.24	3.43	—	2,848	2,848	0.10	0.12	1.55	2,887
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.96	0.93	1.23	2.23	< 0.005	0.04	5.67	5.71	0.04	0.59	0.63	—	472	472	0.02	0.02	0.26	478

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.76	1.49	10.0	18.9	0.03	0.31	45.5	45.8	0.29	4.73	5.02	—	4,248	4,248	0.14	0.16	4.99	4,305
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	4.46	3.78	29.0	32.2	0.08	1.17	51.3	52.5	1.08	7.41	8.49	—	9,776	9,776	0.38	0.21	0.16	9,828
2028	100.0	99.9	10.1	18.0	0.03	0.31	45.7	46.0	0.29	4.78	5.04	—	4,160	4,160	0.14	0.25	0.16	4,212
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.41	0.35	2.65	3.09	0.01	0.11	5.98	6.09	0.10	0.85	0.95	—	901	901	0.03	0.02	0.28	908
2028	5.24	5.08	6.75	12.2	0.02	0.21	31.1	31.3	0.19	3.24	3.43	—	2,848	2,848	0.10	0.12	1.55	2,887
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.07	0.06	0.48	0.56	< 0.005	0.02	1.09	1.11	0.02	0.16	0.17	—	149	149	0.01	< 0.005	0.05	150
2028	0.96	0.93	1.23	2.23	< 0.005	0.04	5.67	5.71	0.04	0.59	0.63	—	472	472	0.02	0.02	0.26	478

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.76	1.49	10.0	18.9	0.03	0.31	45.5	45.8	0.29	4.73	5.02	—	4,248	4,248	0.14	0.16	4.99	4,305
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	4.46	3.78	29.0	32.2	0.08	1.17	51.3	52.5	1.08	7.41	8.49	—	9,776	9,776	0.38	0.21	0.16	9,828
2028	100.0	99.9	10.1	18.0	0.03	0.31	45.7	46.0	0.29	4.78	5.04	—	4,160	4,160	0.14	0.25	0.16	4,212
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.41	0.35	2.65	3.09	0.01	0.11	5.98	6.09	0.10	0.85	0.95	—	901	901	0.03	0.02	0.28	908
2028	5.24	5.08	6.75	12.2	0.02	0.21	31.1	31.3	0.19	3.24	3.43	—	2,848	2,848	0.10	0.12	1.55	2,887
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.07	0.06	0.48	0.56	< 0.005	0.02	1.09	1.11	0.02	0.16	0.17	—	149	149	0.01	< 0.005	0.05	150
2028	0.96	0.93	1.23	2.23	< 0.005	0.04	5.67	5.71	0.04	0.59	0.63	—	472	472	0.02	0.02	0.26	478

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.62	3.38	10.4	6.35	0.01	3.54	0.00	3.54	3.54	0.00	3.54	44.4	1,795	1,840	4.61	0.06	1.82	1,975
Mit.	3.61	3.38	10.3	6.34	0.01	3.54	0.00	3.54	3.54	0.00	3.54	44.4	1,756	1,800	4.61	0.06	1.82	1,936
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%	—	< 0.5%	< 0.5%	—	< 0.5%	—	2%	2%	< 0.5%	—	—	2%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.62	3.38	10.4	6.35	0.01	3.54	0.00	3.54	3.54	0.00	3.54	44.4	1,795	1,840	4.61	0.06	1.82	1,975
Mit.	3.61	3.38	10.3	6.34	0.01	3.54	0.00	3.54	3.54	0.00	3.54	44.4	1,756	1,800	4.61	0.06	1.82	1,936

% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%	—	< 0.5%	< 0.5%	—	< 0.5%	—	2%	2%	< 0.5%	—	—	2%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.58	1.53	2.00	1.42	< 0.005	3.23	0.00	3.23	3.23	0.00	3.23	44.4	849	893	4.57	0.05	1.82	1,025
Mit.	1.58	1.53	1.97	1.41	< 0.005	3.23	0.00	3.23	3.23	0.00	3.23	44.4	809	854	4.57	0.05	1.82	986
% Reduced	< 0.5%	< 0.5%	1%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	—	< 0.5%	—	5%	4%	< 0.5%	—	—	4%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29	0.28	0.36	0.26	< 0.005	0.59	0.00	0.59	0.59	0.00	0.59	7.34	140	148	0.76	0.01	0.30	170
Mit.	0.29	0.28	0.36	0.26	< 0.005	0.59	0.00	0.59	0.59	0.00	0.59	7.34	134	141	0.76	0.01	0.30	163
% Reduced	< 0.5%	< 0.5%	1%	1%	4%	< 0.5%	—	< 0.5%	< 0.5%	—	< 0.5%	—	5%	4%	< 0.5%	< 0.5%	—	4%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	1.17	1.17	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.03	0.01	0.26	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	646	646	0.08	0.01	—	650
Water	—	—	—	—	—	—	—	—	—	—	—	18.5	25.4	43.9	1.90	0.05	—	105
Waste	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Stationary	2.41	2.20	10.1	6.18	0.01	0.43	0.00	0.43	0.43	0.00	0.43	0.00	1,124	1,124	0.05	0.01	0.00	1,128
User-Defined	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—

Total	3.62	3.38	10.4	6.35	0.01	3.54	0.00	3.54	3.54	0.00	3.54	44.4	1,795	1,840	4.61	0.06	1.82	1,975
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	1.17	1.17	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.03	0.01	0.26	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	646	646	0.08	0.01	—	650
Water	—	—	—	—	—	—	—	—	—	—	—	18.5	25.4	43.9	1.90	0.05	—	105
Waste	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Stationary	2.41	2.20	10.1	6.18	0.01	0.43	0.00	0.43	0.43	0.00	0.43	0.00	1,124	1,124	0.05	0.01	0.00	1,128
User-Defined	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—
Total	3.62	3.38	10.4	6.35	0.01	3.54	0.00	3.54	3.54	0.00	3.54	44.4	1,795	1,840	4.61	0.06	1.82	1,975
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	1.17	1.17	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.03	0.01	0.26	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	646	646	0.08	0.01	—	650
Water	—	—	—	—	—	—	—	—	—	—	—	18.5	25.4	43.9	1.90	0.05	—	105
Waste	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Stationary	0.38	0.35	1.73	1.25	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	177	177	0.01	< 0.005	0.00	178
User-Defined	—	—	—	—	—	3.08	—	3.08	3.08	—	3.08	—	—	—	—	—	—	—
Total	1.58	1.53	2.00	1.42	< 0.005	3.23	0.00	3.23	3.23	0.00	3.23	44.4	849	893	4.57	0.05	1.82	1,025
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.21	0.21	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Energy	0.01	< 0.005	0.05	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	107	107	0.01	< 0.005	—	108
Water	—	—	—	—	—	—	—	—	—	—	—	3.07	4.20	7.27	0.32	0.01	—	17.4
Waste	—	—	—	—	—	—	—	—	—	—	—	4.27	0.00	4.27	0.43	0.00	—	15.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.30	0.30
Stationary	0.07	0.06	0.32	0.23	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	29.4	29.4	< 0.005	< 0.005	0.00	29.5
User-Defined	—	—	—	—	—	0.56	—	0.56	0.56	—	0.56	—	—	—	—	—	—	—
Total	0.29	0.28	0.36	0.26	< 0.005	0.59	0.00	0.59	0.59	0.00	0.59	7.34	140	148	0.76	0.01	0.30	170

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	1.17	1.17	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.03	0.01	0.24	0.16	< 0.005	0.02	—	0.02	0.02	—	0.02	—	607	607	0.08	0.01	—	610
Water	—	—	—	—	—	—	—	—	—	—	—	18.5	25.4	43.9	1.90	0.05	—	105
Waste	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Stationary	2.41	2.20	10.1	6.18	0.01	0.43	0.00	0.43	0.43	0.00	0.43	0.00	1,124	1,124	0.05	0.01	0.00	1,128
User-Defined	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—
Total	3.61	3.38	10.3	6.34	0.01	3.54	0.00	3.54	3.54	0.00	3.54	44.4	1,756	1,800	4.61	0.06	1.82	1,936
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Area	1.17	1.17	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.03	0.01	0.24	0.16	< 0.005	0.02	—	0.02	0.02	—	0.02	—	607	607	0.08	0.01	—	610
Water	—	—	—	—	—	—	—	—	—	—	—	18.5	25.4	43.9	1.90	0.05	—	105
Waste	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Stationary	2.41	2.20	10.1	6.18	0.01	0.43	0.00	0.43	0.43	0.00	0.43	0.00	1,124	1,124	0.05	0.01	0.00	1,128
User-Defined	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—
Total	3.61	3.38	10.3	6.34	0.01	3.54	0.00	3.54	3.54	0.00	3.54	44.4	1,756	1,800	4.61	0.06	1.82	1,936
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	1.17	1.17	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.03	0.01	0.24	0.16	< 0.005	0.02	—	0.02	0.02	—	0.02	—	607	607	0.08	0.01	—	610
Water	—	—	—	—	—	—	—	—	—	—	—	18.5	25.4	43.9	1.90	0.05	—	105
Waste	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Stationary	0.38	0.35	1.73	1.25	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	177	177	0.01	< 0.005	0.00	178
User-Defined	—	—	—	—	—	3.08	—	3.08	3.08	—	3.08	—	—	—	—	—	—	—
Total	1.58	1.53	1.97	1.41	< 0.005	3.23	0.00	3.23	3.23	0.00	3.23	44.4	809	854	4.57	0.05	1.82	986
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.21	0.21	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	100	100	0.01	< 0.005	—	101
Water	—	—	—	—	—	—	—	—	—	—	—	3.07	4.20	7.27	0.32	0.01	—	17.4
Waste	—	—	—	—	—	—	—	—	—	—	—	4.27	0.00	4.27	0.43	0.00	—	15.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.30	0.30

Stationa	0.07	0.06	0.32	0.23	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	29.4	29.4	< 0.005	< 0.005	0.00	29.5
User-Defined	—	—	—	—	—	0.56	—	0.56	0.56	—	0.56	—	—	—	—	—	—	—
Total	0.29	0.28	0.36	0.26	< 0.005	0.59	0.00	0.59	0.59	0.00	0.59	7.34	134	141	0.76	0.01	0.30	163

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.01	1.69	15.5	13.9	0.03	0.67	—	0.67	0.61	—	0.61	—	3,555	3,555	0.14	0.03	—	3,567
Dust From Material Movement	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	103	103	< 0.005	0.02	0.01	108
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.85	0.76	< 0.005	0.04	—	0.04	0.03	—	0.03	—	195	195	0.01	< 0.005	—	195

Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.32	2.32	< 0.005	0.23	0.23	—	5.64	5.64	< 0.005	< 0.005	0.01	5.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.2	32.2	< 0.005	< 0.005	—	32.4
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42	0.42	< 0.005	0.04	0.04	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.98
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.48	0.44	5.10	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,170	1,170	0.03	0.05	0.11	1,186
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.1	46.1	< 0.005	0.01	< 0.005	48.1
Hauling	0.03	0.01	0.80	0.20	< 0.005	0.01	0.20	0.21	0.01	0.05	0.07	—	697	697	0.02	0.11	0.04	730
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.2	65.2	< 0.005	< 0.005	0.10	66.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.52	2.52	< 0.005	< 0.005	< 0.005	2.64
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.2	38.2	< 0.005	0.01	0.04	40.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.32	6.32	< 0.005	< 0.005	0.01	6.62

3.2. Site Preparation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.01	1.69	15.5	13.9	0.03	0.67	—	0.67	0.61	—	0.61	—	3,555	3,555	0.14	0.03	—	3,567
Dust From Material Movement	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	103	103	< 0.005	0.02	0.01	108
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.85	0.76	< 0.005	0.04	—	0.04	0.03	—	0.03	—	195	195	0.01	< 0.005	—	195
Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.32	2.32	< 0.005	0.23	0.23	—	5.64	5.64	< 0.005	< 0.005	0.01	5.91

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.2	32.2	< 0.005	< 0.005	—	32.4
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42	0.42	< 0.005	0.04	0.04	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.98
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.48	0.44	5.10	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,170	1,170	0.03	0.05	0.11	1,186
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.1	46.1	< 0.005	0.01	< 0.005	48.1
Hauling	0.03	0.01	0.80	0.20	< 0.005	0.01	0.20	0.21	0.01	0.05	0.07	—	697	697	0.02	0.11	0.04	730
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.2	65.2	< 0.005	< 0.005	0.10	66.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.52	2.52	< 0.005	< 0.005	< 0.005	2.64
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.2	38.2	< 0.005	0.01	0.04	40.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.32	6.32	< 0.005	< 0.005	0.01	6.62

3.3. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.92	3.29	28.3	27.0	0.08	1.17	—	1.17	1.07	—	1.07	—	8,457	8,457	0.34	0.07	—	8,486
Dust From Material Movement	—	—	—	—	—	—	5.94	5.94	—	2.72	2.72	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	103	103	< 0.005	0.02	0.01	108
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.55	1.48	< 0.005	0.06	—	0.06	0.06	—	0.06	—	463	463	0.02	< 0.005	—	465
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.32	2.32	< 0.005	0.23	0.23	—	5.64	5.64	< 0.005	< 0.005	0.01	5.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.7	76.7	< 0.005	< 0.005	—	77.0

Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42	0.42	< 0.005	0.04	0.04	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.98
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.48	0.44	5.10	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,170	1,170	0.03	0.05	0.11	1,186
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.1	46.1	< 0.005	0.01	< 0.005	48.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.2	65.2	< 0.005	< 0.005	0.10	66.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.52	2.52	< 0.005	< 0.005	< 0.005	2.64
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.92	3.29	28.3	27.0	0.08	1.17	—	1.17	1.07	—	1.07	—	8,457	8,457	0.34	0.07	—	8,486
Dust From Material Movement	—	—	—	—	—	—	5.94	5.94	—	2.72	2.72	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	103	103	< 0.005	0.02	0.01	108
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.55	1.48	< 0.005	0.06	—	0.06	0.06	—	0.06	—	463	463	0.02	< 0.005	—	465
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.32	2.32	< 0.005	0.23	0.23	—	5.64	5.64	< 0.005	< 0.005	0.01	5.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.7	76.7	< 0.005	< 0.005	—	77.0
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42	0.42	< 0.005	0.04	0.04	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.98
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.48	0.44	5.10	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,170	1,170	0.03	0.05	0.11	1,186
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.1	46.1	< 0.005	0.01	< 0.005	48.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.2	65.2	< 0.005	< 0.005	0.10	66.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.52	2.52	< 0.005	< 0.005	< 0.005	2.64
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	103	103	< 0.005	0.02	0.01	108
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.01	0.13	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.8	32.8	< 0.005	< 0.005	—	32.9
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.44	5.44	< 0.005	< 0.005	—	5.46
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.24
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.48	0.44	5.10	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,170	1,170	0.03	0.05	0.11	1,186
Vendor	0.01	0.01	0.25	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	192	192	0.01	0.03	0.01	201
Hauling	0.02	0.01	0.42	0.13	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	334	334	0.01	0.05	0.02	350
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.3	16.3	< 0.005	< 0.005	0.02	16.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.63	2.63	< 0.005	< 0.005	< 0.005	2.75
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.58	4.58	< 0.005	< 0.005	< 0.005	4.80

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.70	2.70	< 0.005	< 0.005	< 0.005	2.73
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.46
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.79

3.6. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	103	103	< 0.005	0.02	0.01	108
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.8	32.8	< 0.005	< 0.005	—	32.9
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.44	5.44	< 0.005	< 0.005	—	5.46

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.24
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.48	0.44	5.10	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,170	1,170	0.03	0.05	0.11	1,186
Vendor	0.01	0.01	0.25	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	192	192	0.01	0.03	0.01	201
Hauling	0.02	0.01	0.42	0.13	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	334	334	0.01	0.05	0.02	350
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.3	16.3	< 0.005	< 0.005	0.02	16.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.63	2.63	< 0.005	< 0.005	< 0.005	2.75
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.58	4.58	< 0.005	< 0.005	< 0.005	4.80
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.70	2.70	< 0.005	< 0.005	< 0.005	2.73
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.46
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.79

3.7. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	100	100	< 0.005	0.02	0.21	105
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	100	100	< 0.005	0.02	0.01	105
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.50	7.97	0.01	0.19	—	0.19	0.17	—	0.17	—	1,478	1,478	0.06	0.01	—	1,483
Onsite truck	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	26.1	26.1	< 0.005	2.60	2.60	—	61.8	61.8	< 0.005	0.01	0.05	64.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.00	1.46	< 0.005	0.03	—	0.03	0.03	—	0.03	—	245	245	0.01	< 0.005	—	246
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	4.76	4.76	< 0.005	0.47	0.48	—	10.2	10.2	< 0.005	< 0.005	0.01	10.7
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.49	0.35	5.71	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,237	1,237	0.02	0.05	3.68	1,256
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	187	187	< 0.005	0.03	0.42	196

Hauling	0.02	0.01	0.39	0.12	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	326	326	0.01	0.05	0.69	342
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.46	0.40	4.75	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,149	1,149	0.02	0.05	0.10	1,163
Vendor	0.01	0.01	0.24	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	187	187	< 0.005	0.03	0.01	195
Hauling	0.02	0.01	0.41	0.12	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	326	326	0.01	0.05	0.02	342
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.28	0.24	3.02	0.00	0.00	0.74	0.74	0.00	0.17	0.17	—	720	720	0.02	0.03	0.98	730
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	115	115	< 0.005	0.02	0.11	121
Hauling	0.01	< 0.005	0.25	0.08	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	201	201	0.01	0.03	0.18	211
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.55	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	119	119	< 0.005	< 0.005	0.16	121
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.1	19.1	< 0.005	< 0.005	0.02	20.0
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.3	33.3	< 0.005	0.01	0.03	34.9

3.8. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	100	100	< 0.005	0.02	0.21	105

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	100	100	< 0.005	0.02	0.01	105
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.50	7.97	0.01	0.19	—	0.19	0.17	—	0.17	—	1,478	1,478	0.06	0.01	—	1,483
Onsite truck	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	26.1	26.1	< 0.005	2.60	2.60	—	61.8	61.8	< 0.005	0.01	0.05	64.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.00	1.46	< 0.005	0.03	—	0.03	0.03	—	0.03	—	245	245	0.01	< 0.005	—	246
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	4.76	4.76	< 0.005	0.47	0.48	—	10.2	10.2	< 0.005	< 0.005	0.01	10.7
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.49	0.35	5.71	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,237	1,237	0.02	0.05	3.68	1,256
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	187	187	< 0.005	0.03	0.42	196
Hauling	0.02	0.01	0.39	0.12	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	326	326	0.01	0.05	0.69	342
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.46	0.40	4.75	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,149	1,149	0.02	0.05	0.10	1,163

Vendor	0.01	0.01	0.24	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	187	187	< 0.005	0.03	0.01	195
Hauling	0.02	0.01	0.41	0.12	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	326	326	0.01	0.05	0.02	342
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.28	0.24	3.02	0.00	0.00	0.74	0.74	0.00	0.17	0.17	—	720	720	0.02	0.03	0.98	730
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	115	115	< 0.005	0.02	0.11	121
Hauling	0.01	< 0.005	0.25	0.08	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	201	201	0.01	0.03	0.18	211
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.55	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	119	119	< 0.005	< 0.005	0.16	121
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.1	19.1	< 0.005	< 0.005	0.02	20.0
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.3	33.3	< 0.005	0.01	0.03	34.9

3.9. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	100	100	< 0.005	0.02	0.01	105
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.04	0.04	0.36	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.32	2.32	< 0.005	0.23	0.23	—	5.50	5.50	< 0.005	< 0.005	< 0.005	5.77
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42	0.42	< 0.005	0.04	0.04	—	0.91	0.91	< 0.005	< 0.005	< 0.005	0.96
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.46	0.40	4.75	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,149	1,149	0.02	0.05	0.10	1,163
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.02	1.39	0.42	0.01	0.02	0.32	0.34	0.02	0.09	0.11	—	1,108	1,108	0.04	0.18	0.06	1,162
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.27	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.0	64.0	< 0.005	< 0.005	0.09	64.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.7	60.7	< 0.005	0.01	0.06	63.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.6	10.6	< 0.005	< 0.005	0.01	10.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.5

3.10. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	100	100	< 0.005	0.02	0.01	105
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.36	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.32	2.32	< 0.005	0.23	0.23	—	5.50	5.50	< 0.005	< 0.005	< 0.005	5.77
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42	0.42	< 0.005	0.04	0.04	—	0.91	0.91	< 0.005	< 0.005	< 0.005	0.96

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.46	0.40	4.75	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,149	1,149	0.02	0.05	0.10	1,163
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.02	1.39	0.42	0.01	0.02	0.32	0.34	0.02	0.09	0.11	—	1,108	1,108	0.04	0.18	0.06	1,162
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.27	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.0	64.0	< 0.005	< 0.005	0.09	64.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.7	60.7	< 0.005	0.01	0.06	63.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.6	10.6	< 0.005	< 0.005	0.01	10.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.5

3.11. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	99.4	99.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	100	100	< 0.005	0.02	0.01	105
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.49	5.49	< 0.005	< 0.005	—	5.51
Architectural Coatings	4.08	4.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	1.74	1.74	< 0.005	0.17	0.17	—	4.12	4.12	< 0.005	< 0.005	< 0.005	4.33
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.91	0.91	< 0.005	< 0.005	—	0.91
Architectural Coatings	0.75	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.32	0.32	< 0.005	0.03	0.03	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.72
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.46	0.40	4.75	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,149	1,149	0.02	0.05	0.10	1,163
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.0	45.0	< 0.005	0.01	< 0.005	46.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.0	48.0	< 0.005	< 0.005	0.07	48.6
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.93
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.94	7.94	< 0.005	< 0.005	0.01	8.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134

Architectural Coating	99.4	99.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	100	100	< 0.005	0.02	0.01	105
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.49	5.49	< 0.005	< 0.005	—	5.51
Architectural Coatings	4.08	4.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	1.74	1.74	< 0.005	0.17	0.17	—	4.12	4.12	< 0.005	< 0.005	< 0.005	4.33
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.91	0.91	< 0.005	< 0.005	—	0.91
Architectural Coatings	0.75	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.32	0.32	< 0.005	0.03	0.03	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.72
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.46	0.40	4.75	0.00	0.00	1.22	1.22	0.00	0.28	0.28	—	1,149	1,149	0.02	0.05	0.10	1,163
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.0	45.0	< 0.005	0.01	< 0.005	46.9

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.0	48.0	< 0.005	< 0.005	0.07	48.6
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.93
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.94	7.94	< 0.005	< 0.005	0.01	8.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	32.5	32.5	0.01	< 0.005	—	32.8

Apartme Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	30.0	30.0	< 0.005	< 0.005	—	30.3
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	52.7	52.7	0.01	< 0.005	—	53.2
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	37.9	37.9	0.01	< 0.005	—	38.3
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	169	169	0.03	< 0.005	—	170
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	322	322	0.05	0.01	—	325
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	32.5	32.5	0.01	< 0.005	—	32.8
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	30.0	30.0	< 0.005	< 0.005	—	30.3
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	52.7	52.7	0.01	< 0.005	—	53.2
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	37.9	37.9	0.01	< 0.005	—	38.3

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	169	169	0.03	< 0.005	—	170
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	322	322	0.05	0.01	—	325
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.38	5.38	< 0.005	< 0.005	—	5.43
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	4.96	4.96	< 0.005	< 0.005	—	5.01
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	8.73	8.73	< 0.005	< 0.005	—	8.82
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	6.27	6.27	< 0.005	< 0.005	—	6.33
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	27.9	27.9	< 0.005	< 0.005	—	28.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	53.3	53.3	0.01	< 0.005	—	53.8

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	32.5	32.5	0.01	< 0.005	—	32.8
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	27.9	27.9	< 0.005	< 0.005	—	28.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	49.3	49.3	0.01	< 0.005	—	49.8
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	36.9	36.9	0.01	< 0.005	—	37.3
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	165	165	0.03	< 0.005	—	167
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	312	312	0.05	0.01	—	315
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	32.5	32.5	0.01	< 0.005	—	32.8
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	27.9	27.9	< 0.005	< 0.005	—	28.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	49.3	49.3	0.01	< 0.005	—	49.8

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	36.9	36.9	0.01	< 0.005	—	37.3
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	165	165	0.03	< 0.005	—	167
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	312	312	0.05	0.01	—	315
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.38	5.38	< 0.005	< 0.005	—	5.43
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	4.63	4.63	< 0.005	< 0.005	—	4.67
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	8.17	8.17	< 0.005	< 0.005	—	8.25
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	6.11	6.11	< 0.005	< 0.005	—	6.17
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	27.4	27.4	< 0.005	< 0.005	—	27.7
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	51.7	51.7	0.01	< 0.005	—	52.2

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	146	146	0.01	< 0.005	—	146
Government Office Building	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.7	32.7	< 0.005	< 0.005	—	32.8
General Light Industry	0.01	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.9	90.9	0.01	< 0.005	—	91.1
Unrefrigerated Warehouse-No Rail	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	54.3	54.3	< 0.005	< 0.005	—	54.4
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.01	0.26	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	324	324	0.03	< 0.005	—	325
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	146	146	0.01	< 0.005	—	146

Government Office Building	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.7	32.7	< 0.005	< 0.005	—	32.8
General Light Industry	0.01	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.9	90.9	0.01	< 0.005	—	91.1
Unrefrigerated Warehouse-No Rail	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	54.3	54.3	< 0.005	< 0.005	—	54.4
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.01	0.26	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	324	324	0.03	< 0.005	—	325
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.2	24.2	< 0.005	< 0.005	—	24.2
Government Office Building	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.42	5.42	< 0.005	< 0.005	—	5.43
General Light Industry	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.0	15.0	< 0.005	< 0.005	—	15.1
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.99	8.99	< 0.005	< 0.005	—	9.01
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.05	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	53.6	53.6	< 0.005	< 0.005	—	53.8

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	128
Government Office Building	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.7	29.7	< 0.005	< 0.005	—	29.8
General Light Industry	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.5	88.5	0.01	< 0.005	—	88.8
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48.3	48.3	< 0.005	< 0.005	—	48.4
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.01	0.24	0.16	< 0.005	0.02	—	0.02	0.02	—	0.02	—	294	294	0.03	< 0.005	—	295
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	128

Govern Office Building	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.7	29.7	< 0.005	< 0.005	—	29.8
General Light Industry	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.5	88.5	0.01	< 0.005	—	88.8
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48.3	48.3	< 0.005	< 0.005	—	48.4
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.01	0.24	0.16	< 0.005	0.02	—	0.02	0.02	—	0.02	—	294	294	0.03	< 0.005	—	295
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.2	21.2	< 0.005	< 0.005	—	21.2
Government Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.92	4.92	< 0.005	< 0.005	—	4.93
General Light Industry	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.7
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.00	8.00	< 0.005	< 0.005	—	8.02
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48.7	48.7	< 0.005	< 0.005	—	48.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	1.07	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.17	1.17	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	1.07	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.17	1.17	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consumer	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.21	0.21	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	1.07	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.17	1.17	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	1.07	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	1.17	1.17	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.21	0.21	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.20	1.65	2.85	0.12	< 0.005	—	6.82
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	1.72	2.36	4.08	0.18	< 0.005	—	9.76
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	2.98	4.08	7.06	0.31	0.01	—	16.9

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	12.6	17.3	29.9	1.30	0.03	—	71.6
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.5	25.4	43.9	1.90	0.05	—	105
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.20	1.65	2.85	0.12	< 0.005	—	6.82
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	1.72	2.36	4.08	0.18	< 0.005	—	9.76
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	2.98	4.08	7.06	0.31	0.01	—	16.9
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	12.6	17.3	29.9	1.30	0.03	—	71.6
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.5	25.4	43.9	1.90	0.05	—	105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.20	0.27	0.47	0.02	< 0.005	—	1.13

Government	—	—	—	—	—	—	—	—	—	—	—	0.28	0.39	0.67	0.03	< 0.005	—	1.62
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.49	0.68	1.17	0.05	< 0.005	—	2.80
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2.09	2.86	4.95	0.21	0.01	—	11.9
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.07	4.20	7.27	0.32	0.01	—	17.4

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.20	1.65	2.85	0.12	< 0.005	—	6.82
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	1.72	2.36	4.08	0.18	< 0.005	—	9.76
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	2.98	4.08	7.06	0.31	0.01	—	16.9

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	12.6	17.3	29.9	1.30	0.03	—	71.6
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.5	25.4	43.9	1.90	0.05	—	105
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.20	1.65	2.85	0.12	< 0.005	—	6.82
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	1.72	2.36	4.08	0.18	< 0.005	—	9.76
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	2.98	4.08	7.06	0.31	0.01	—	16.9
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	12.6	17.3	29.9	1.30	0.03	—	71.6
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.5	25.4	43.9	1.90	0.05	—	105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.20	0.27	0.47	0.02	< 0.005	—	1.13
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	0.28	0.39	0.67	0.03	< 0.005	—	1.62
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.49	0.68	1.17	0.05	< 0.005	—	2.80
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2.09	2.86	4.95	0.21	0.01	—	11.9
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.07	4.20	7.27	0.32	0.01	—	17.4

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	4.62	0.00	4.62	0.46	0.00	—	16.2

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	2.27	0.00	2.27	0.23	0.00	—	7.93
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	4.49	0.00	4.49	0.45	0.00	—	15.7
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	4.62	0.00	4.62	0.46	0.00	—	16.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	2.27	0.00	2.27	0.23	0.00	—	7.93
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	4.49	0.00	4.49	0.45	0.00	—	15.7
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.77	0.00	0.77	0.08	0.00	—	2.68
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.31
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.74	0.00	0.74	0.07	0.00	—	2.60
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2.39	0.00	2.39	0.24	0.00	—	8.36
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.27	0.00	4.27	0.43	0.00	—	15.0

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Apartme Low Rise	—	—	—	—	—	—	—	—	—	—	—	4.62	0.00	4.62	0.46	0.00	—	16.2
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	2.27	0.00	2.27	0.23	0.00	—	7.93
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	4.49	0.00	4.49	0.45	0.00	—	15.7
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	4.62	0.00	4.62	0.46	0.00	—	16.2
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	2.27	0.00	2.27	0.23	0.00	—	7.93
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	4.49	0.00	4.49	0.45	0.00	—	15.7

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.77	0.00	0.77	0.08	0.00	—	2.68
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.31
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.74	0.00	0.74	0.07	0.00	—	2.60
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2.39	0.00	2.39	0.24	0.00	—	8.36
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.27	0.00	4.27	0.43	0.00	—	15.0

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.75	1.75
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.75	1.75
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.30	0.30

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.75	1.75
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.75	1.75
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.30	0.30

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generator	2.01	1.83	8.20	4.67	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	938	938	0.04	0.01	0.00	941
Fire Pump	0.40	0.36	1.90	1.50	< 0.005	0.16	0.00	0.16	0.16	0.00	0.16	0.00	186	186	0.01	< 0.005	0.00	187
Total	2.41	2.20	10.1	6.18	0.01	0.43	0.00	0.43	0.43	0.00	0.43	0.00	1,124	1,124	0.05	0.01	0.00	1,128
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.01	1.83	8.20	4.67	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	938	938	0.04	0.01	0.00	941
Fire Pump	0.40	0.36	1.90	1.50	< 0.005	0.16	0.00	0.16	0.16	0.00	0.16	0.00	186	186	0.01	< 0.005	0.00	187
Total	2.41	2.20	10.1	6.18	0.01	0.43	0.00	0.43	0.43	0.00	0.43	0.00	1,124	1,124	0.05	0.01	0.00	1,128
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.08	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	8.51	8.51	< 0.005	< 0.005	0.00	8.54
Fire Pump	0.05	0.04	0.23	0.18	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	20.9	20.9	< 0.005	< 0.005	0.00	20.9
Total	0.07	0.06	0.32	0.23	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	29.4	29.4	< 0.005	< 0.005	0.00	29.5

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	2.01	1.83	8.20	4.67	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	938	938	0.04	0.01	0.00	941
Fire Pump	0.40	0.36	1.90	1.50	< 0.005	0.16	0.00	0.16	0.16	0.00	0.16	0.00	186	186	0.01	< 0.005	0.00	187
Total	2.41	2.20	10.1	6.18	0.01	0.43	0.00	0.43	0.43	0.00	0.43	0.00	1,124	1,124	0.05	0.01	0.00	1,128
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.01	1.83	8.20	4.67	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	938	938	0.04	0.01	0.00	941
Fire Pump	0.40	0.36	1.90	1.50	< 0.005	0.16	0.00	0.16	0.16	0.00	0.16	0.00	186	186	0.01	< 0.005	0.00	187
Total	2.41	2.20	10.1	6.18	0.01	0.43	0.00	0.43	0.43	0.00	0.43	0.00	1,124	1,124	0.05	0.01	0.00	1,128
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.08	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	8.51	8.51	< 0.005	< 0.005	0.00	8.54
Fire Pump	0.05	0.04	0.23	0.18	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	20.9	20.9	< 0.005	< 0.005	0.00	20.9
Total	0.07	0.06	0.32	0.23	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	29.4	29.4	< 0.005	< 0.005	0.00	29.5

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust Collectors for Mixer	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—
Total	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust Collectors for Mixer	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—
Total	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust Collectors for Mixer	—	—	—	—	—	0.56	—	0.56	0.56	—	0.56	—	—	—	—	—	—	—
Total	—	—	—	—	—	0.56	—	0.56	0.56	—	0.56	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust Collectors for Mixer	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—
Total	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust Collectors for Mixer	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—

Total	—	—	—	—	—	3.09	—	3.09	3.09	—	3.09	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust Collectors for Mixer	—	—	—	—	—	0.56	—	0.56	0.56	—	0.56	—	—	—	—	—	—	—
Total	—	—	—	—	—	0.56	—	0.56	0.56	—	0.56	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	10/30/2027	11/26/2027	5.00	20.0	—
Grading	Grading	11/27/2027	12/24/2027	5.00	20.0	—
Building Construction	Building Construction	12/25/2027	11/10/2028	5.00	230	—
Paving	Paving	11/11/2028	12/8/2028	5.00	20.0	—
Architectural Coating	Architectural Coating	12/9/2028	12/29/2028	5.00	15.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	8.00	200	0.40
Site Preparation	Excavators	Diesel	Average	2.00	8.00	300	0.37
Grading	Excavators	Diesel	Average	3.00	8.00	300	0.38
Grading	Rubber Tired Dozers	Diesel	Average	2.00	8.00	200	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20

Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	8.00	200	0.40
Site Preparation	Excavators	Diesel	Average	2.00	8.00	300	0.37
Grading	Excavators	Diesel	Average	3.00	8.00	300	0.38
Grading	Rubber Tired Dozers	Diesel	Average	2.00	8.00	200	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	140	12.3	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	7.57	HHDT,MHDT
Site Preparation	Hauling	4.70	45.0	HHDT
Site Preparation	Onsite truck	3.00	10.0	HHDT
Grading	—	—	—	—
Grading	Worker	140	12.3	LDA,LDT1,LDT2
Grading	Vendor	2.00	7.57	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	3.00	10.0	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	140	12.3	LDA,LDT1,LDT2
Building Construction	Vendor	8.33	7.57	HHDT,MHDT
Building Construction	Hauling	5.00	20.0	HHDT
Building Construction	Onsite truck	3.00	10.0	HHDT
Paving	—	—	—	—
Paving	Worker	140	12.3	LDA,LDT1,LDT2
Paving	Vendor	0.00	7.57	HHDT,MHDT
Paving	Hauling	17.0	20.0	HHDT
Paving	Onsite truck	3.00	10.0	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	140	12.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	7.57	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	3.00	10.0	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	140	12.3	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	7.57	HHDT,MHDT
Site Preparation	Hauling	4.70	45.0	HHDT
Site Preparation	Onsite truck	3.00	10.0	HHDT
Grading	—	—	—	—
Grading	Worker	140	12.3	LDA,LDT1,LDT2
Grading	Vendor	2.00	7.57	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	3.00	10.0	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	140	12.3	LDA,LDT1,LDT2
Building Construction	Vendor	8.33	7.57	HHDT,MHDT
Building Construction	Hauling	5.00	20.0	HHDT
Building Construction	Onsite truck	3.00	10.0	HHDT
Paving	—	—	—	—
Paving	Worker	140	12.3	LDA,LDT1,LDT2
Paving	Vendor	0.00	7.57	HHDT,MHDT
Paving	Hauling	17.0	20.0	HHDT
Paving	Onsite truck	3.00	10.0	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	140	12.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	7.57	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	3.00	10.0	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	17,909	5,970	59,615	19,872	25,221

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	750	20.0	0.00	—
Grading	0.00	0.00	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	9.65

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Parking Lot	1.52	100%
Apartments Low Rise	—	0%
Government Office Building	0.00	0%

General Light Industry	0.00	0%
Unrefrigerated Warehouse-No Rail	0.00	0%
Other Non-Asphalt Surfaces	8.13	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0

Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
17909.1	5,970	59,615	19,872	25,221

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	58,144	204	0.0330	0.0040	0.00
Apartments Low Rise	53,628	204	0.0330	0.0040	455,489
Government Office Building	94,339	204	0.0330	0.0040	102,098
General Light Industry	67,779	204	0.0330	0.0040	283,546
Unrefrigerated Warehouse-No Rail	302,019	204	0.0330	0.0040	169,397
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	58,144	204	0.0330	0.0040	0.00
Apartments Low Rise	50,002	204	0.0330	0.0040	399,001
Government Office Building	88,246	204	0.0330	0.0040	92,724

General Light Industry	66,064	204	0.0330	0.0040	276,181
Unrefrigerated Warehouse-No Rail	296,090	204	0.0330	0.0040	150,730
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	0.00
Apartments Low Rise	627,232	0.00
Government Office Building	897,942	0.00
General Light Industry	1,554,000	0.00
Unrefrigerated Warehouse-No Rail	6,591,319	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	0.00
Apartments Low Rise	627,232	0.00
Government Office Building	897,942	0.00
General Light Industry	1,554,000	0.00
Unrefrigerated Warehouse-No Rail	6,591,319	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—
Apartments Low Rise	8.58	—
Government Office Building	4.20	—
General Light Industry	8.33	—
Unrefrigerated Warehouse-No Rail	26.8	—
Other Non-Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—
Apartments Low Rise	8.58	—
Government Office Building	4.20	—
General Light Industry	8.33	—
Unrefrigerated Warehouse-No Rail	26.8	—
Other Non-Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00

Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	20.0	1,117	0.73
Fire Pump	Diesel	1.00	2.00	2.00	6.00	0.73
Fire Pump	Diesel	1.00	2.00	2.00	30.0	0.73
Fire Pump	Diesel	1.00	6.00	2,190	25.0	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
Dust Collectors for Mixer	—

8. User Changes to Default Data

Screen	Justification
Land Use	Square footage based on building information matrix for funded buildings phase 1
Construction: Construction Phases	adjust schedule of site prep/grading and paving to reach 27 months.
Construction: Off-Road Equipment	Revised siteprep/grading to be 2 dozers and 2 large excavators based on information from client
Characteristics: Project Details	rural area
Construction: Trips and VMT	1 water truck and 2 dump trucks onsite at 10 miles per day. assumed 2 vendors per day, 140 worker trips per day based on 70 workers/day. Hauling based on amount of concrete and asphalt. For debris export assumed 45 miles ~1 hour away
Operations: Landscape Equipment	no landscaping

Hollister CALFIRE unfunded Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Hollister CALFIRE unfunded
Construction Start Date	1/1/2029
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	Statewide
Windspeed (m/s)	3.60
Precipitation (days)	15.6
Location	36.88972754606007, -121.4093293651272
County	San Benito
City	Hollister
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3102
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Government Office Building	6.30	1000sqft	0.14	6,300	0.00	0.00	—	Future Office

Automobile Care Center	12.7	1000sqft	0.29	12,709	0.00	0.00	—	Repair Shop
General Light Industry	0.26	1000sqft	0.01	262	0.00	0.00	—	Haz met storage
Health Club	1.20	1000sqft	0.03	1,200	0.00	0.00	—	Gym
General Light Industry	0.30	1000sqft	0.01	300	0.00	0.00	—	Communications

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	96.4	96.4	4.43	7.27	0.01	0.15	44.3	44.5	0.14	4.45	4.59	—	1,599	1,599	0.06	0.05	0.77	1,616
Mit.	96.4	96.4	4.43	7.27	0.01	0.15	44.3	44.5	0.14	4.45	4.59	—	1,599	1,599	0.06	0.05	0.77	1,616
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.15	0.97	7.99	9.81	0.02	0.35	49.5	49.9	0.32	6.99	7.31	—	1,831	1,831	0.07	0.05	0.02	1,840
Mit.	1.15	0.97	7.99	9.81	0.02	0.35	46.3	46.6	0.32	5.42	5.75	—	1,831	1,831	0.07	0.05	0.02	1,840

% Reduced	—	—	—	—	—	—	7%	6%	—	22%	21%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.49	1.46	1.34	2.15	< 0.005	0.04	13.1	13.2	0.04	1.33	1.37	—	467	467	0.02	0.01	0.08	472
Mit.	1.49	1.46	1.34	2.15	< 0.005	0.04	13.1	13.2	0.04	1.32	1.36	—	467	467	0.02	0.01	0.08	472
% Reduced	—	—	—	—	—	—	< 0.5%	< 0.5%	—	1%	1%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.27	0.27	0.24	0.39	< 0.005	0.01	2.40	2.41	0.01	0.24	0.25	—	77.3	77.3	< 0.005	< 0.005	0.01	78.1
Mit.	0.27	0.27	0.24	0.39	< 0.005	0.01	2.40	2.40	0.01	0.24	0.25	—	77.3	77.3	< 0.005	< 0.005	0.01	78.1
% Reduced	—	—	—	—	—	—	< 0.5%	< 0.5%	—	1%	1%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	96.4	96.4	4.43	7.27	0.01	0.15	44.3	44.5	0.14	4.45	4.59	—	1,599	1,599	0.06	0.05	0.77	1,616
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.15	0.97	7.99	9.81	0.02	0.35	49.5	49.9	0.32	6.99	7.31	—	1,831	1,831	0.07	0.05	0.02	1,840
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.49	1.46	1.34	2.15	< 0.005	0.04	13.1	13.2	0.04	1.33	1.37	—	467	467	0.02	0.01	0.08	472
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.27	0.27	0.24	0.39	< 0.005	0.01	2.40	2.41	0.01	0.24	0.25	—	77.3	77.3	< 0.005	< 0.005	0.01	78.1

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	96.4	96.4	4.43	7.27	0.01	0.15	44.3	44.5	0.14	4.45	4.59	—	1,599	1,599	0.06	0.05	0.77	1,616
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.15	0.97	7.99	9.81	0.02	0.35	46.3	46.6	0.32	5.42	5.75	—	1,831	1,831	0.07	0.05	0.02	1,840
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.49	1.46	1.34	2.15	< 0.005	0.04	13.1	13.2	0.04	1.32	1.36	—	467	467	0.02	0.01	0.08	472
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.27	0.27	0.24	0.39	< 0.005	0.01	2.40	2.40	0.01	0.24	0.25	—	77.3	77.3	< 0.005	< 0.005	0.01	78.1

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.50	0.49	0.20	0.17	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	38.5	403	442	3.90	0.02	2,635	3,179
Mit.	0.50	0.49	0.19	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	38.5	387	426	3.90	0.02	2,635	3,163
% Reduced	—	—	4%	4%	—	—	—	—	—	—	—	—	4%	4%	< 0.5%	—	—	1%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.50	0.49	0.20	0.17	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	38.5	403	442	3.90	0.02	2,635	3,179

Mit.	0.50	0.49	0.19	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	38.5	387	426	3.90	0.02	2,635	3,163
% Reduced	—	—	4%	4%	—	—	—	—	—	—	—	—	4%	4%	< 0.5%	—	—	1%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.50	0.49	0.20	0.17	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	38.5	403	442	3.90	0.02	2,635	3,179
Mit.	0.50	0.49	0.19	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	38.5	387	426	3.90	0.02	2,635	3,163
% Reduced	—	—	4%	4%	—	—	—	—	—	—	—	—	4%	4%	< 0.5%	—	—	1%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.09	0.04	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	6.37	66.8	73.1	0.65	< 0.005	436	526
Mit.	0.09	0.09	0.04	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	6.37	64.1	70.5	0.65	< 0.005	436	524
% Reduced	< 0.5%	< 0.5%	4%	4%	4%	4%	—	4%	4%	—	4%	—	4%	4%	< 0.5%	1%	—	1%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	396	396	0.05	< 0.005	—	399
Water	—	—	—	—	—	—	—	—	—	—	—	5.07	6.95	12.0	0.52	0.01	—	28.8
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
Total	0.50	0.49	0.20	0.17	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	38.5	403	442	3.90	0.02	2,635	3,179

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	396	396	0.05	< 0.005	—	399
Water	—	—	—	—	—	—	—	—	—	—	—	5.07	6.95	12.0	0.52	0.01	—	28.8
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
Total	0.50	0.49	0.20	0.17	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	38.5	403	442	3.90	0.02	2,635	3,179
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	396	396	0.05	< 0.005	—	399
Water	—	—	—	—	—	—	—	—	—	—	—	5.07	6.95	12.0	0.52	0.01	—	28.8
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
Total	0.50	0.49	0.20	0.17	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	38.5	403	442	3.90	0.02	2,635	3,179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	65.6	65.6	0.01	< 0.005	—	66.0
Water	—	—	—	—	—	—	—	—	—	—	—	0.84	1.15	1.99	0.09	< 0.005	—	4.77
Waste	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	436	436
Total	0.09	0.09	0.04	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	6.37	66.8	73.1	0.65	< 0.005	436	526

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	380	380	0.04	< 0.005	—	382
Water	—	—	—	—	—	—	—	—	—	—	—	5.07	6.95	12.0	0.52	0.01	—	28.8
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
Total	0.50	0.49	0.19	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	38.5	387	426	3.90	0.02	2,635	3,163
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	380	380	0.04	< 0.005	—	382
Water	—	—	—	—	—	—	—	—	—	—	—	5.07	6.95	12.0	0.52	0.01	—	28.8
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
Total	0.50	0.49	0.19	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	38.5	387	426	3.90	0.02	2,635	3,163
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	380	380	0.04	< 0.005	—	382
Water	—	—	—	—	—	—	—	—	—	—	—	5.07	6.95	12.0	0.52	0.01	—	28.8
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635

Total	0.50	0.49	0.19	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	38.5	387	426	3.90	0.02	2,635	3,163
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.0	63.0	0.01	< 0.005	—	63.3
Water	—	—	—	—	—	—	—	—	—	—	—	0.84	1.15	1.99	0.09	< 0.005	—	4.77
Waste	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	436	436
Total	0.09	0.09	0.04	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	6.37	64.1	70.5	0.65	< 0.005	436	524

3. Construction Emissions Details

3.1. Site Preparation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.38	2.96	5.59	0.01	0.13	—	0.13	0.12	—	0.12	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.8	97.8	< 0.005	0.02	< 0.005	103

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.35	2.35	< 0.005	< 0.005	—	2.36
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.39	0.39	< 0.005	< 0.005	—	0.39
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.3	40.3	< 0.005	< 0.005	< 0.005	40.8
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.9	21.9	< 0.005	< 0.005	< 0.005	22.8
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.5	63.5	< 0.005	0.01	< 0.005	66.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03

3.2. Site Preparation (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.38	2.96	5.59	0.01	0.13	—	0.13	0.12	—	0.12	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.8	97.8	< 0.005	0.02	< 0.005	103
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.35	2.35	< 0.005	< 0.005	—	2.36

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.39	0.39	< 0.005	< 0.005	—	0.39
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.3	40.3	< 0.005	< 0.005	< 0.005	40.8
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.9	21.9	< 0.005	< 0.005	< 0.005	22.8
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.5	63.5	< 0.005	0.01	< 0.005	66.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03

3.3. Grading (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	7.88	9.53	0.02	0.35	—	0.35	0.32	—	0.32	—	1,714	1,714	0.07	0.01	—	1,720
Dust From Material Movement	—	—	—	—	—	—	5.31	5.31	—	2.57	2.57	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.8	97.8	< 0.005	0.02	< 0.005	103
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.39	9.39	< 0.005	< 0.005	—	9.42
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.23	0.23	< 0.005	0.02	0.02	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.55	1.55	< 0.005	< 0.005	—	1.56
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.5	60.5	< 0.005	< 0.005	< 0.005	61.3
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.9	21.9	< 0.005	< 0.005	< 0.005	22.8
Hauling	> -0.005	> -0.005	-0.08	-0.02	> -0.005	> -0.005	-0.02	-0.02	> -0.005	-0.01	-0.01	—	-63.5	-63.5	> -0.005	-0.01	> -0.005	-66.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Hauling	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.35	-0.35	> -0.005	> -0.005	> -0.005	-0.36
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Hauling	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.06	-0.06	> -0.005	> -0.005	> -0.005	-0.06

3.4. Grading (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	7.88	9.53	0.02	0.35	—	0.35	0.32	—	0.32	—	1,714	1,714	0.07	0.01	—	1,720
Dust From Material Movement	—	—	—	—	—	—	2.07	2.07	—	1.00	1.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.8	97.8	< 0.005	0.02	< 0.005	103
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.39	9.39	< 0.005	< 0.005	—	9.42
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.23	0.23	< 0.005	0.02	0.02	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.55	1.55	< 0.005	< 0.005	—	1.56

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.5	60.5	< 0.005	< 0.005	< 0.005	61.3
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.9	21.9	< 0.005	< 0.005	< 0.005	22.8
Hauling	> -0.005	> -0.005	-0.08	-0.02	> -0.005	> -0.005	-0.02	-0.02	> -0.005	-0.01	-0.01	—	-63.5	-63.5	> -0.005	-0.01	> -0.005	-66.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Hauling	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.35	-0.35	> -0.005	> -0.005	> -0.005	-0.36
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Hauling	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.06	-0.06	> -0.005	> -0.005	> -0.005	-0.06

3.5. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	4.11	6.89	0.01	0.14	—	0.14	0.13	—	0.13	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.7	97.7	< 0.005	0.02	0.19	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	4.11	6.89	0.01	0.14	—	0.14	0.13	—	0.13	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.8	97.8	< 0.005	0.02	< 0.005	103
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.13	1.89	< 0.005	0.04	—	0.04	0.03	—	0.03	—	357	357	0.01	< 0.005	—	359
Onsite truck	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	26.8	26.8	< 0.005	< 0.005	0.02	28.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.2	59.2	< 0.005	< 0.005	—	59.4
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.11	2.11	< 0.005	0.21	0.21	—	4.43	4.43	< 0.005	< 0.005	< 0.005	4.65
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.3	59.3	< 0.005	< 0.005	0.16	60.1
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	74.4	74.4	< 0.005	0.01	0.15	77.8
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.5	63.5	< 0.005	0.01	0.13	66.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.0	55.0	< 0.005	< 0.005	< 0.005	55.7
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	74.5	74.5	< 0.005	0.01	< 0.005	77.8
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.5	63.5	< 0.005	0.01	< 0.005	66.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	0.02	15.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.4	20.4	< 0.005	< 0.005	0.02	21.3
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.4	17.4	< 0.005	< 0.005	0.01	18.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.54	2.54	< 0.005	< 0.005	< 0.005	2.57
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.38	3.38	< 0.005	< 0.005	< 0.005	3.53
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.88	2.88	< 0.005	< 0.005	< 0.005	3.02

3.6. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	4.11	6.89	0.01	0.14	—	0.14	0.13	—	0.13	—	1,304	1,304	0.05	0.01	—	1,309

Onsite truck	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.7	97.7	< 0.005	0.02	0.19	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	4.11	6.89	0.01	0.14	—	0.14	0.13	—	0.13	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.8	97.8	< 0.005	0.02	< 0.005	103
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.13	1.89	< 0.005	0.04	—	0.04	0.03	—	0.03	—	357	357	0.01	< 0.005	—	359
Onsite truck	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	26.8	26.8	< 0.005	< 0.005	0.02	28.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.2	59.2	< 0.005	< 0.005	—	59.4
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.11	2.11	< 0.005	0.21	0.21	—	4.43	4.43	< 0.005	< 0.005	< 0.005	4.65
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.3	59.3	< 0.005	< 0.005	0.16	60.1
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	74.4	74.4	< 0.005	0.01	0.15	77.8
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.5	63.5	< 0.005	0.01	0.13	66.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.0	55.0	< 0.005	< 0.005	< 0.005	55.7
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	74.5	74.5	< 0.005	0.01	< 0.005	77.8
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.5	63.5	< 0.005	0.01	< 0.005	66.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	0.02	15.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.4	20.4	< 0.005	< 0.005	0.02	21.3
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.4	17.4	< 0.005	< 0.005	0.01	18.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.54	2.54	< 0.005	< 0.005	< 0.005	2.57
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.38	3.38	< 0.005	< 0.005	< 0.005	3.53
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.88	2.88	< 0.005	< 0.005	< 0.005	3.02

3.7. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	3.98	5.31	0.01	0.15	—	0.15	0.14	—	0.14	—	823	823	0.03	0.01	—	826
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.7	97.7	< 0.005	0.02	0.19	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.3
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	1.34	1.34	< 0.005	< 0.005	< 0.005	1.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.87	1.87	< 0.005	< 0.005	—	1.87
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.23
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	152	152	< 0.005	0.01	0.41	154
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.9	21.9	< 0.005	< 0.005	0.04	22.9
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.5	63.5	< 0.005	0.01	0.13	66.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.31
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.33
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15

3.8. Paving (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	3.98	5.31	0.01	0.15	—	0.15	0.14	—	0.14	—	823	823	0.03	0.01	—	826
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.7	97.7	< 0.005	0.02	0.19	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.3
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	1.34	1.34	< 0.005	< 0.005	< 0.005	1.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.87	1.87	< 0.005	< 0.005	—	1.87
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.23

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	152	152	< 0.005	0.01	0.41	154
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.9	21.9	< 0.005	< 0.005	0.04	22.9
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.5	63.5	< 0.005	0.01	0.13	66.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.31
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.33
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15

3.9. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134

Architectural	96.3	96.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.7	97.7	< 0.005	0.02	0.19	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	1.32	1.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	1.34	1.34	< 0.005	< 0.005	< 0.005	1.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.23
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.03	12.0
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.9	21.9	< 0.005	< 0.005	0.04	22.9

Hauling	-0.01	> -0.005	-0.23	-0.07	> -0.005	> -0.005	-0.06	-0.06	> -0.005	-0.02	-0.02	—	-190	-190	-0.01	-0.03	-0.38	-200
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.31
Hauling	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-2.61	-2.61	> -0.005	> -0.005	> -0.005	-2.74
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Hauling	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.43	-0.43	> -0.005	> -0.005	> -0.005	-0.45

3.10. Architectural Coating (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	96.3	96.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	97.7	97.7	< 0.005	0.02	0.19	103

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	1.32	1.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	1.34	1.34	< 0.005	< 0.005	< 0.005	1.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.23
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.03	12.0
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.9	21.9	< 0.005	< 0.005	0.04	22.9
Hauling	-0.01	> -0.005	-0.23	-0.07	> -0.005	> -0.005	-0.06	-0.06	> -0.005	-0.02	-0.02	—	-190	-190	-0.01	-0.03	-0.38	-200
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.31
Hauling	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-2.61	-2.61	> -0.005	> -0.005	> -0.005	-2.74
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Hauling	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.43	-0.43	> -0.005	> -0.005	> -0.005	-0.45

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	73.5	73.5	0.01	< 0.005	—	74.2

Automo Care Center	—	—	—	—	—	—	—	—	—	—	—	—	71.6	71.6	0.01	< 0.005	—	72.3
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	3.17	3.17	< 0.005	< 0.005	—	3.20
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	6.76	6.76	< 0.005	< 0.005	—	6.83
Total	—	—	—	—	—	—	—	—	—	—	—	—	155	155	0.03	< 0.005	—	157
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	73.5	73.5	0.01	< 0.005	—	74.2
Automo bile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	71.6	71.6	0.01	< 0.005	—	72.3
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	3.17	3.17	< 0.005	< 0.005	—	3.20
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	6.76	6.76	< 0.005	< 0.005	—	6.83
Total	—	—	—	—	—	—	—	—	—	—	—	—	155	155	0.03	< 0.005	—	157
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.2	12.2	< 0.005	< 0.005	—	12.3
Automo bile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	11.9	11.9	< 0.005	< 0.005	—	12.0

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52	< 0.005	< 0.005	—	0.53
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12	< 0.005	< 0.005	—	1.13
Total	—	—	—	—	—	—	—	—	—	—	—	—	25.7	25.7	< 0.005	< 0.005	—	25.9

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	68.8	68.8	0.01	< 0.005	—	69.4
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	69.8	69.8	0.01	< 0.005	—	70.5
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	3.09	3.09	< 0.005	< 0.005	—	3.12
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	6.59	6.59	< 0.005	< 0.005	—	6.66
Total	—	—	—	—	—	—	—	—	—	—	—	—	148	148	0.02	< 0.005	—	150
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	68.8	68.8	0.01	< 0.005	—	69.4

Automobile	—	—	—	—	—	—	—	—	—	—	—	—	69.8	69.8	0.01	< 0.005	—	70.5
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	3.09	3.09	< 0.005	< 0.005	—	3.12
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	6.59	6.59	< 0.005	< 0.005	—	6.66
Total	—	—	—	—	—	—	—	—	—	—	—	—	148	148	0.02	< 0.005	—	150
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4	< 0.005	< 0.005	—	11.5
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6	< 0.005	< 0.005	—	11.7
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51	< 0.005	< 0.005	—	0.52
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09	< 0.005	< 0.005	—	1.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	24.5	24.5	< 0.005	< 0.005	—	24.8

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.6	45.6	< 0.005	< 0.005	—	45.7

Automo Care Center	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	172
General Light Industry	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.60	7.60	< 0.005	< 0.005	—	7.62
Health Club	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.2	16.2	< 0.005	< 0.005	—	16.3
Total	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	241	241	0.02	< 0.005	—	242
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.6	45.6	< 0.005	< 0.005	—	45.7
Automobile Care Center	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	172
General Light Industry	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.60	7.60	< 0.005	< 0.005	—	7.62
Health Club	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.2	16.2	< 0.005	< 0.005	—	16.3
Total	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	241	241	0.02	< 0.005	—	242
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.55	7.55	< 0.005	< 0.005	—	7.57
Automobile Care Center	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.5	28.5	< 0.005	< 0.005	—	28.5

General Light Industry	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.26	1.26	< 0.005	< 0.005	—	1.26
Health Club	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.69	2.69	< 0.005	< 0.005	—	2.69
Total	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.9	39.9	< 0.005	< 0.005	—	40.1

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.4	41.4	< 0.005	< 0.005	—	41.5
Automobile Care Center	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	167	167	0.01	< 0.005	—	168
General Light Industry	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.40	7.40	< 0.005	< 0.005	—	7.42
Health Club	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Total	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	232	232	0.02	< 0.005	—	233
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.4	41.4	< 0.005	< 0.005	—	41.5

Automobile	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	167	167	0.01	< 0.005	—	168
General Light Industry	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.40	7.40	< 0.005	< 0.005	—	7.42
Health Club	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Total	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	232	232	0.02	< 0.005	—	233
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.86	6.86	< 0.005	< 0.005	—	6.88
Automobile Care Center	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.7	27.7	< 0.005	< 0.005	—	27.8
General Light Industry	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.23	1.23	< 0.005	< 0.005	—	1.23
Health Club	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.62	2.62	< 0.005	< 0.005	—	2.62
Total	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.4	38.4	< 0.005	< 0.005	—	38.5

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Products	0.44	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.44	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.44	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.44	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	2.40	3.28	5.68	0.25	0.01	—	13.6
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	2.29	3.14	5.43	0.24	0.01	—	13.0
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.25	0.34	0.59	0.03	< 0.005	—	1.41
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.14	0.19	0.32	0.01	< 0.005	—	0.77
Total	—	—	—	—	—	—	—	—	—	—	—	5.07	6.95	12.0	0.52	0.01	—	28.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	2.40	3.28	5.68	0.25	0.01	—	13.6
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	2.29	3.14	5.43	0.24	0.01	—	13.0
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.25	0.34	0.59	0.03	< 0.005	—	1.41

Health Club	—	—	—	—	—	—	—	—	—	—	—	0.14	0.19	0.32	0.01	< 0.005	—	0.77
Total	—	—	—	—	—	—	—	—	—	—	—	5.07	6.95	12.0	0.52	0.01	—	28.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	0.40	0.54	0.94	0.04	< 0.005	—	2.25
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	0.38	0.52	0.90	0.04	< 0.005	—	2.15
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.04	0.06	0.10	< 0.005	< 0.005	—	0.23
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.02	0.03	0.05	< 0.005	< 0.005	—	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	0.84	1.15	1.99	0.09	< 0.005	—	4.77

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	2.40	3.28	5.68	0.25	0.01	—	13.6
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	2.29	3.14	5.43	0.24	0.01	—	13.0

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.25	0.34	0.59	0.03	< 0.005	—	1.41
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.14	0.19	0.32	0.01	< 0.005	—	0.77
Total	—	—	—	—	—	—	—	—	—	—	—	5.07	6.95	12.0	0.52	0.01	—	28.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	2.40	3.28	5.68	0.25	0.01	—	13.6
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	2.29	3.14	5.43	0.24	0.01	—	13.0
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.25	0.34	0.59	0.03	< 0.005	—	1.41
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.14	0.19	0.32	0.01	< 0.005	—	0.77
Total	—	—	—	—	—	—	—	—	—	—	—	5.07	6.95	12.0	0.52	0.01	—	28.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	0.40	0.54	0.94	0.04	< 0.005	—	2.25
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	0.38	0.52	0.90	0.04	< 0.005	—	2.15
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.04	0.06	0.10	< 0.005	< 0.005	—	0.23
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.02	0.03	0.05	< 0.005	< 0.005	—	0.13

Total	—	—	—	—	—	—	—	—	—	—	—	0.84	1.15	1.99	0.09	< 0.005	—	4.77

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	3.16	0.00	3.16	0.32	0.00	—	11.0
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	26.2	0.00	26.2	2.62	0.00	—	91.5
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.31
Health Club	—	—	—	—	—	—	—	—	—	—	—	3.69	0.00	3.69	0.37	0.00	—	12.9
Total	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	3.16	0.00	3.16	0.32	0.00	—	11.0
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	26.2	0.00	26.2	2.62	0.00	—	91.5

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.31
Health Club	—	—	—	—	—	—	—	—	—	—	—	3.69	0.00	3.69	0.37	0.00	—	12.9
Total	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	0.52	0.00	0.52	0.05	0.00	—	1.83
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	4.33	0.00	4.33	0.43	0.00	—	15.2
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	0.00	—	0.22
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.61	0.00	0.61	0.06	0.00	—	2.14
Total	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.3

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	3.16	0.00	3.16	0.32	0.00	—	11.0

Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	26.2	0.00	26.2	2.62	0.00	—	91.5
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.31
Health Club	—	—	—	—	—	—	—	—	—	—	—	3.69	0.00	3.69	0.37	0.00	—	12.9
Total	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	3.16	0.00	3.16	0.32	0.00	—	11.0
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	26.2	0.00	26.2	2.62	0.00	—	91.5
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.31
Health Club	—	—	—	—	—	—	—	—	—	—	—	3.69	0.00	3.69	0.37	0.00	—	12.9
Total	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	0.52	0.00	0.52	0.05	0.00	—	1.83
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	4.33	0.00	4.33	0.43	0.00	—	15.2

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	0.00	—	0.22
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.61	0.00	0.61	0.06	0.00	—	2.14
Total	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.3

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.15	0.15
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.15	0.15
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	436	436
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	436	436

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.15	0.15
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.15	0.15
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,635	2,635
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	436	436
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	436	436

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/16/2029	1/17/2029	5.00	1.00	—
Grading	Grading	1/18/2029	1/20/2029	5.00	2.00	—
Building Construction	Building Construction	1/21/2029	6/10/2029	5.00	100	—
Paving	Paving	6/11/2029	6/18/2029	5.00	5.00	—
Architectural Coating	Architectural Coating	6/19/2029	6/26/2029	5.00	5.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38

Paving	Tractors/Loaders/Back	Diesel	Average	1.00	7.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	12.3	LDA,LDT1,LDT2

Site Preparation	Vendor	1.00	7.57	HHDT,MHDT
Site Preparation	Hauling	1.00	20.0	HHDT
Site Preparation	Onsite truck	3.00	10.0	HHDT
Grading	—	—	—	—
Grading	Worker	7.50	12.3	LDA,LDT1,LDT2
Grading	Vendor	1.00	7.57	HHDT,MHDT
Grading	Hauling	-1.00	20.0	HHDT
Grading	Onsite truck	3.00	10.0	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	6.82	12.3	LDA,LDT1,LDT2
Building Construction	Vendor	3.40	7.57	HHDT,MHDT
Building Construction	Hauling	1.00	20.0	HHDT
Building Construction	Onsite truck	3.00	10.0	HHDT
Paving	—	—	—	—
Paving	Worker	17.5	12.3	LDA,LDT1,LDT2
Paving	Vendor	1.00	7.57	HHDT,MHDT
Paving	Hauling	1.00	20.0	HHDT
Paving	Onsite truck	3.00	10.0	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.36	12.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	1.00	7.57	HHDT,MHDT
Architectural Coating	Hauling	-3.00	20.0	HHDT
Architectural Coating	Onsite truck	3.00	10.0	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	12.3	LDA,LDT1,LDT2

Site Preparation	Vendor	1.00	7.57	HHDT,MHDT
Site Preparation	Hauling	1.00	20.0	HHDT
Site Preparation	Onsite truck	3.00	10.0	HHDT
Grading	—	—	—	—
Grading	Worker	7.50	12.3	LDA,LDT1,LDT2
Grading	Vendor	1.00	7.57	HHDT,MHDT
Grading	Hauling	-1.00	20.0	HHDT
Grading	Onsite truck	3.00	10.0	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	6.82	12.3	LDA,LDT1,LDT2
Building Construction	Vendor	3.40	7.57	HHDT,MHDT
Building Construction	Hauling	1.00	20.0	HHDT
Building Construction	Onsite truck	3.00	10.0	HHDT
Paving	—	—	—	—
Paving	Worker	17.5	12.3	LDA,LDT1,LDT2
Paving	Vendor	1.00	7.57	HHDT,MHDT
Paving	Hauling	1.00	20.0	HHDT
Paving	Onsite truck	3.00	10.0	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.36	12.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	1.00	7.57	HHDT,MHDT
Architectural Coating	Hauling	-3.00	20.0	HHDT
Architectural Coating	Onsite truck	3.00	10.0	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	31,157	10,386	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	0.50	0.00	—
Grading	0.00	0.00	1.50	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Government Office Building	0.00	0%
Automobile Care Center	0.00	0%
General Light Industry	0.00	0%
Health Club	0.00	0%
General Light Industry	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

2029	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	31,157	10,386	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government Office Building	131,490	204	0.0330	0.0040	142,304
Automobile Care Center	128,185	204	0.0330	0.0040	536,247
General Light Industry	2,643	204	0.0330	0.0040	11,055
Health Club	12,103	204	0.0330	0.0040	50,633
General Light Industry	3,026	204	0.0330	0.0040	12,658

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government Office Building	123,046	204	0.0330	0.0040	129,239
Automobile Care Center	124,942	204	0.0330	0.0040	522,319
General Light Industry	2,576	204	0.0330	0.0040	10,768
Health Club	11,797	204	0.0330	0.0040	49,318
General Light Industry	2,949	204	0.0330	0.0040	12,329

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Government Office Building	1,251,556	0.00
Automobile Care Center	1,195,677	0.00
General Light Industry	60,588	0.00
Health Club	70,972	0.00
General Light Industry	69,375	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Government Office Building	1,251,556	0.00
Automobile Care Center	1,195,677	0.00
General Light Industry	60,588	0.00
Health Club	70,972	0.00
General Light Industry	69,375	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government Office Building	5.86	—
Automobile Care Center	48.5	—
General Light Industry	0.32	—
Health Club	6.84	—
General Light Industry	0.37	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government Office Building	5.86	—
Automobile Care Center	48.5	—
General Light Industry	0.32	—
Health Club	6.84	—
General Light Industry	0.37	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	data not available at county level
Construction: Construction Phases	no demolition
Construction: Trips and VMT	assumed 3 onsite for water trucks and dump trucks at 10 miles per day. assumed 1 vendor and 1 hauling per day.
Operations: Landscape Equipment	no landscaping

Appendix C

Biological Resources Report

Hollister Air Attack Base Relocation Project

Technical Report

BIOLOGICAL RESOURCES REPORT
HOLLISTER AIR ATTACK BASE RELOCATION PROJECT

October 2024

Prepared for:

California Department of General Services
Real Estate Services Division
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Montrose Environmental

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Appendices

Figures

Acronyms and Abbreviations

AMMs	Avoidance and minimization measures
CAL FIRE	California Department of Forestry and Fire Protection
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CRPR	California Rare Plant Rank
CVH	Hollister Municipal Airport
CWA	Clean Water Act
DGS	California Department of General Services
ESA	Endangered Species Act
F. & G. Code	California Fish and Game Code
FR	Federal Register
IPaC	Information for Planning and Conservation
MBTA	Migratory Bird Treaty Act
Montrose	Montrose Environmental
NMFS	National Marine Fisheries Service
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
PAPI-2	Precision Approach Path Indicators
Project	Cal Fire Hollister Air Attack Base Relocation Project
REILs	Runway End Identifier Lights
RWQCB	Regional Water Quality Control Board
SCVWD	Valley Water
sq mi	Square miles
SR 25	State Highway 25
SR 156	Pacheco Pass Highway
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

°F	degrees Fahrenheit
§	Section

1 Introduction

1.1 Project Overview

The California Department of General Services (DGS) is assisting the California Department of Forestry and Fire Protection (CAL FIRE) in planning the Hollister Air Attack Base Relocation Project (Project). The Project is located at the Hollister Municipal Airport (CVH) in the City of Hollister in San Benito County, California, east of California State Route 25 (SR 25) (**Figure 1**). The Project plans to relocate the existing Hollister Air Attack Base facilities to a 16.23-acre area within the CVH. The new location is approximately 550 feet west of the existing base.

The Project would involve construction of:

- air operations building (a two-story building that would provide a control room [tower]);
- barracks/mess hall (32 beds, replacing the existing modular units);
- three-bay apparatus storage and warehouse building;
- combination helicopter/OV-10 hangar to provide secure storage and weather protection for these aircraft;
- S2-T canopies: two weather protective covers (approximately 85-foot by 55-foot) to provide weather protection and light maintenance area for S2-T aircraft;
- helicopter training tower with a hoist system for rappelling training;
- retardant mixing station (approximately 40,000 gallons of storage for fire retardant chemical) to replace old, outdated equipment and provide the ability to deliver the quantity and type of retardant (Gel/Phoscheck) utilizing CAL FIRE staff when contract suppliers are not able to provide retardant that meets the state's criteria; and
- communications tower.

There are future plans to install an emergency generator building, fire pump, covered garbage enclosure, automobile shop, storage building, covered fire pump test pit, water tower, vehicle fueling station, gym building, communications equipment building, photovoltaic panels, and office building.

This report assesses biological resources within a 52-acre area in the southwest corner of the CVH (Study Area). The Study Area is within the western portion of CVH, east of SR 25 and bordered by Airway Drive, Aerostar Way, Pacheco Pass Highway (State Route 156), and San Felipe Road (State Route 156B) (**Figure 2**). **Appendix A** provides representative site photographs.

Montrose Environmental (Montrose) prepared this biological resources report to document and describe biological resources within the Study Area.

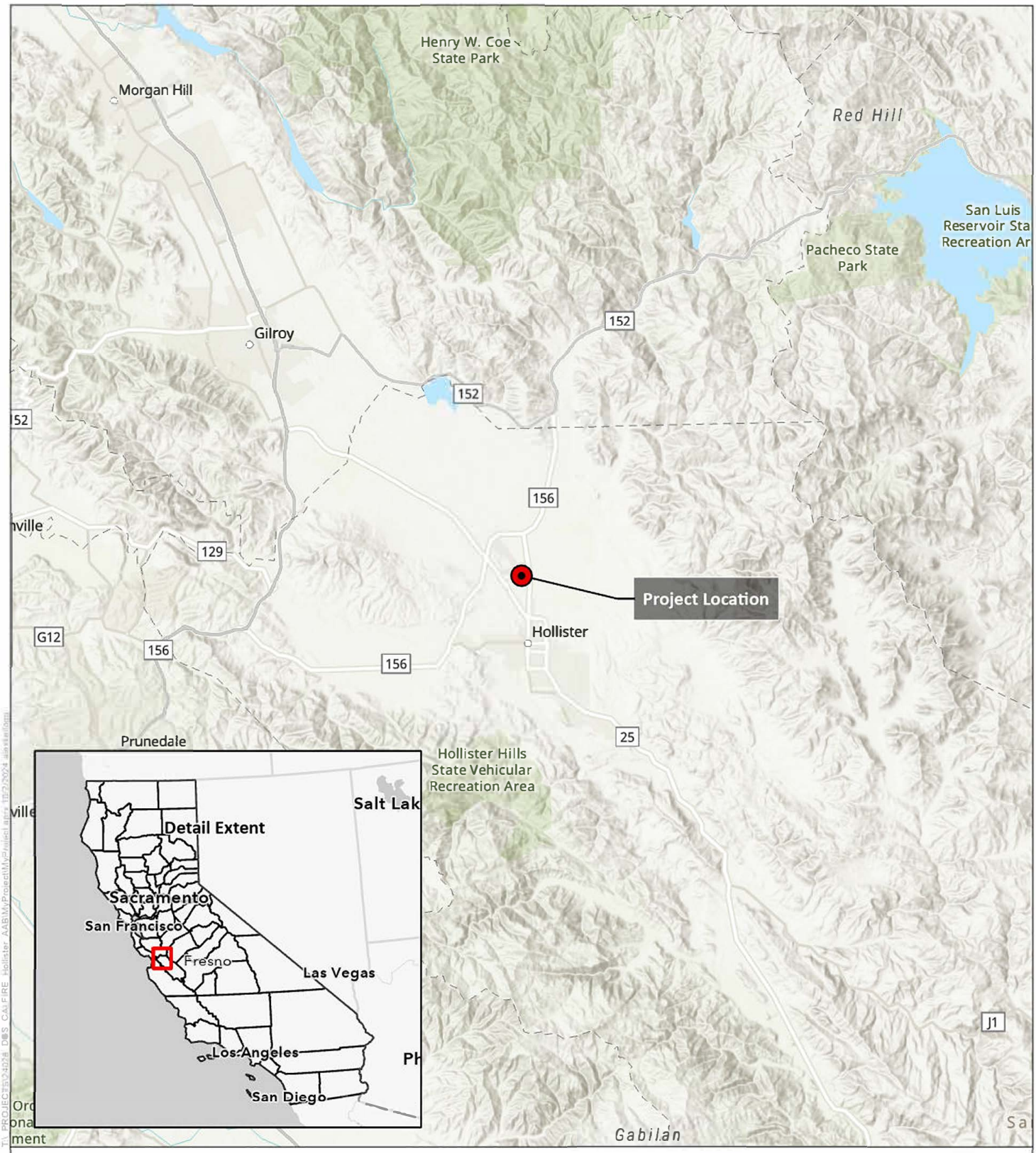


Figure 1
Project Vicinity

Project Location/ Study Area

N

0 5
Miles

MONTROSE ENVIRONMENTAL

CAL FIRE Hollister Air Attack Base/Bear Valley Helitack Base
Relocate Facilities Project

N

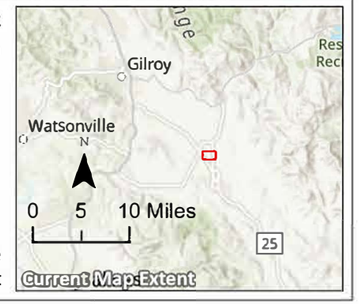
Study Area

0 0.1 0.3 Miles

MONTROSE ENVIRONMENTAL

Basemap Sources: Hybrid Reference Layer: Esri Community Maps Contributors.

Figure 2
Project Location



CAL FIRE Hollister Air Attack Base/Bear Valley Helitack Base Relocate Facilities Project

2 Environmental Setting

2.1 Watershed and Topography

The Study Area is located within the Gilroy-Hollister Valley Groundwater Basin in San Benito County. For areas within the City of Hollister, the main source of water supply is groundwater. The basin includes 200 square miles (sq mi) within San Benito County and small areas in Santa Clara County. The basin consists of a series of connected valleys and uplands in the Coast Ranges and is situated within the Pajaro River Watershed. The Basin consists of four management areas. The Study Area is within the Hollister Management Area.

The basin covers a portion of the Pajaro River Watershed, which encompasses 1,300 square miles and is the largest coastal stream between San Francisco Bay and the Salinas River watershed in Monterey County (RMC 2002). The watershed covers portions of Santa Cruz, Santa Clara, San Benito, and Monterey Counties and the drainage area contains three mountain ranges (Diablo Range, Gabilan Range, and Santa Cruz Mountains). The watershed is approximately 90 miles in length and drains into the Pacific Ocean at Monterey Bay. The main tributaries to the Pajaro River include the San Benito River, Tres Pinos River, Santa Ana Creek, Arroyo Dos Picachos, Pacheco Creek, and Tesquisquita Slough. These streams are dry throughout much of the year and mainly flow during wet winter conditions (Todd Groundwater 2021).

Major surface water features within the vicinity of the Study Area include Santa Ana Creek, which lies approximately 0.7 mile to the east. Santa Ana Creek has a flow path of approximately 22 miles through Santa Ana Valley, with headwaters located in the hills of the Coast Ranges.

Site topography in the Study Area is generally flat, with elevations averaging approximately 230 feet above mean sea level with the surrounding area containing low hills and agricultural land within the vicinity of the CVH (U.S. Geological Survey [USGS] 2021). Representative site photographs are shown in **Appendix A**.

2.2 Climate

The Study Area has a Mediterranean climate characterized by cool, wet winters and dry summers. Average temperatures range from a low of 32 degrees Fahrenheit (°F) in February to a high of 97°F in August. Mean annual precipitation is approximately 14 inches, with most of this occurring from November through April (Natural Resource Conservation Service [NRCS] 2024a).

2.3 Soils

The Study Area is underlain by the following soil types:

- Pacheco silty clay; and
- Clear Lake clay, drained, low precip, 0 to 2 percent slopes, MLRA 14 (NRCS 2024b)

The latter soil is classified as a hydric soil (NRCS 2024c).

2.4 Land Use

The Study Area (52 acres) is bounded by existing airport runways to the north and east and a mix of industrial and commercial development and ruderal grassland to the south and west. Two major roadways, SR 25 and SR 156, are approximately 0.4 mile west and 0.2 mile east, respectively. The Study Area contains undeveloped areas consisting of ruderal grassland, with buildings within the northwest corner and active runways throughout the CVH. The west side of the Study Area contains a remnant infrastructure building within the ruderal grassland area, and established roads and access roads.

Land uses surrounding the Study Area predominantly support agriculture but also consist of commercial and industrial uses. Land uses in the general region are characterized by agriculture; urban areas, including the City of Hollister and the City of San Juan Bautista; rural communities; and upland areas with grazing land.

3 Existing Biological Resources

3.1 Inventory Methods

Baseline biological resources in the Study Area were evaluated by reviewing pertinent literature and conducting a field survey to supplement background information with representative site-specific data. The inventory methods are described below.

3.1.1 Literature Reviewed

Biological resource information in the Study Area was evaluated by reviewing the following data sources:

- U.S. Fish and Wildlife Service (USFWS), Information for Planning and Conservation (IPaC) list of federally listed endangered and threatened species (USFWS 2024a);
- USFWS's Critical Habitat Portal (USFWS 2024b);
- National Wetland Inventory (NWI) results (USFWS 2024c);
- National Marine Fisheries Service (NMFS) California Species List (NMFS 2024a);
- California Department of Fish and Wildlife (CDFW), California Natural Diversity Database (CNDDB) queries for the following U.S. Geological Survey (USGS) 7.5-minute quadrangles encompassing and surrounding the Study Area: Gilroy, Gilroy Hot Springs, Pacheco Peak, Chittenden, San Felipe, Three Sisters, San Juan Bautista, and Tres Pinos (CDFW 2024a);
- eBird records for the Study Area (Cornell Lab of Ornithology 2024); and
- Aerial photography (Google Earth 2024).

Results from the database queries are provided in **Appendix B**. Maps of CNDDB occurrence records within 5 miles of the Study Area for special-status plants (**Figure 3**) and special-status wildlife, including fish (**Figure 4**), were created based on the database review.

3.1.2 Field Survey

Montrose biologist Jessica González conducted a biological reconnaissance survey on July 30, 2024. The survey effort consisted of a visual assessment of site conditions in the Study Area. Maps of baseline biological resources, including a regional aerial photographic overview of the Study Area and detailed aerial photography, were used in the survey.

Surveys were conducted in the field on foot. Natural and anthropogenic features and land cover types were noted. All plant and wildlife species observed were recorded. Wildlife detections were made based on visual observations and/or the presence of sign such as tracks or scat. Visual aids, such as binoculars, were used to better assess wildlife species when appropriate.

San Felipe
152
Pacheco Creek
Dunneville
Pacheco Pass Hwy
25
156
State Route 156
Hudner
Hollister Municipal Airport
Arroyo Dos Picachos
Flint Hills
Bolsa Rd
San Felipe Rd
Benito River
Hollister
Hollister Valley
San Juan Rd
San Juan Oaks Golf Club
Ridgemark

Project Area
5-Mile Buffer
Special Status Plants
San Joaquin spearscale
alkali milk-vetch
hairless popcornflower
saline clover

N
0 1 Miles

Figure 3
Special-Status Plant Species within 5 Mile Radius of Project Area

CAL FIRE Hollister Air Attack Base/Bear Valley Helitack Base Relocate Facilities Project

MONTROSE ENVIRONMENTAL

Data Source: CNDDB October 2024, CDFW

T:_PROJECTS\24028_DGS_CALFIRE_Hollister_AAB\MyProject\Hollester Figures 3 & 4\Hollester Figures 3 & 4 aprx 10/8/2024 Jon VM1

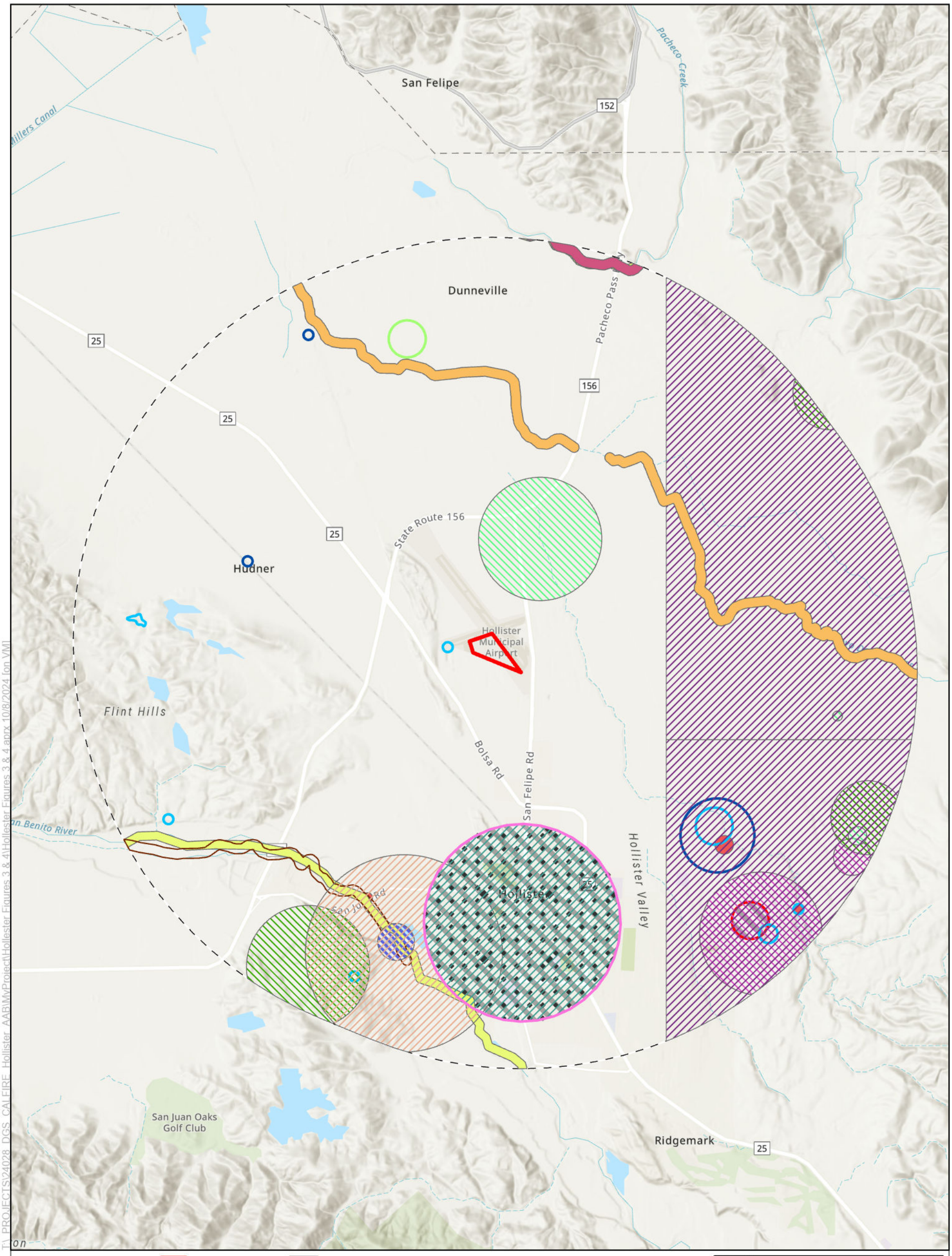


Figure 4
Special-Status Animal Species within 5 Mile Radius of Project Area

CAL FIRE Hollister Air Attack Base/Bear Valley Helitack Base Relocate Facilities Project

MONTROSE ENVIRONMENTAL Data Source: CNDDB October 2024, CDFW

T:_PROJECTS\24028_DGS_CALFIRE_Hollister_AABM\vProject\Hollester Figures 3 & 4\Hollester Figures 3 & 4 aprx 10/8/2024 [on VM]

3.2 Terrestrial Communities

Non-native Annual Grassland

Most of the Study Area (approximately 46.42 acres), comprises non-native annual grassland habitat. Within the Study Area, this habitat types includes predominantly non-native grasses, along with native and non-native forbs, and bare ground. Non-native grasses and forbs common in the area includes soft brome (*Bromus hordeaceus*), wild oat (*Avena fatua),* milk thistle (*Silybum marinum*)*,* foxtail barley *(Hordeum leporinum),* field mustard *(Brassica campestris),* wild radish *(Rhaphanus sativus),* hare barley (*Hordeum murinum* ssp. *leporinum*), bristly ox-tongue (*Helminthotheca echioides*), common tarweed (*Centromadia pungens* ssp*. pungens.*), bird's-foot trefoil (*Lotus corniculatus*), stinkwort (*Dittrichia graveolens*), rough cocklebur (*Xanthium strumarium*), bur clover (*Medicago polymorpha*), hairy fleabane (*Conyza bonariensis*), bermuda grass (*Cynodon dactylon*), yellow star-thistle (*Centaurea solstitialis*), cheeseweed (*Malva parviflora*)*,* medusahead (*Taeniatherum caput-medusae*), fat hen (*Atriplex patula*), prickly lettuce (*Lactuca serriola*), chicory (*Cichorium intybus*), field bindweed (*Convolvulus arvensis*), and dock (*Rumex* sp.).

Within the non-native annual grassland area within the Study Area, bird species that were observed during the field survey included loggerhead shrike (*Lanius ludovicianus*), white-crowned sparrow (*Zonotrichia leucophrys*), American kestrel (*Falco sparverius*), black phoebe (*Sayornis nigricans*), song sparrow (*Melospiza melodia*), western meadowlark (*Sturnella neglecta*), and American crow (*Corvus brachyrhynchos*). Brush within this habitat may support nesting habitat for bird species.

The non-native annual grassland areas within the runways and taxiways of the CVH are mowed and disked on a monthly basis as part of the routine operations and maintenance of the airport.

Pocket gopher (*Thomomys bottae*) burrows and California ground squirrel (*Otospermophilus beecheyi*) burrows were observed throughout the Study Area, being more concentrated within the eastern portion of the taxiway and runway areas. As part of routine operations and maintenance of the airport, ground squirrels and their associated burrows near taxiway signs, Runway End Identifier Lights (REILs), and Precision Approach Path Indicators (PAPI-2) are managed. Rodenticide is used as pest abatement, including both broadcast and bait station distribution methods.

Developed

Approximately 5.58 acres of the Study Area is considered developed. This includes remnant infrastructure of a building at the north end of the Study Area, T-hangar buildings in the northwest corner, and established roads within the CVH that border the western portion of the Study Area.

3.3 Special-status Species

For the purpose of this report, special-status plant and wildlife species refer to those species that meet one or more of the following criteria:

- Species that are listed as threatened or endangered under the federal Endangered Species Act (ESA) (50 CFR 17.12 for listed plants, 50 CFR 17.11 for listed animals);
- Species that are candidates for possible future listing as threatened or endangered under ESA (76 Federal Register [FR] 66370);
- Species that are listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (14 CCR 670.5);

- Plants listed as rare under the California Native Plant Protection Act of 1977 (California Fish and Game Code [F. & G. Code], § 1900 et seq.);
- California Rare Plant Rank (CRPR) List 1 and 2 species; and
- Animals fully protected in California (F. & G. Code, §§ 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

3.3.1 Plants

Special-status plants known to occur in the vicinity of the Study Area were evaluated for their potential to occur (**Appendix C**). No special-status plants were identified by the background review as possibly occurring in the Study Area due to the vegetated portions of the Study Area being heavily altered and disturbed, including monthly mowing and at a minimum monthly disking, as part of the routine operations and maintenance of the airport. Continuous mowing and disking have occurred in the annual grassland for years as part of airport routine maintenance. This continuous disturbance makes it highly unlikely for rare plants to establish or persist on site. A complete list of plant species observed during the biological reconnaissance survey is provided in **Appendix D**.

3.3.2 Wildlife

A total of 25 special-status wildlife species known to occur in the region were evaluated for their potential to occur (Appendix C). Of these, seven were determined to have a low potential to occur in the Study Area. The remaining 18 species were determined to have no potential to occur. The six species with potential to occur in the Study Area are summarized below.

- **Crotch bumble bee** (*Bombus crotchii*). Crotch bumble bee may potentially occur within the Study Area. The Study Area is within the historic range and mapped range of this species. However, there are no known occurrences within 5 miles of the Study Area (CDFW 2024). The Study Area may support marginally suitable foraging habitat for Crotch bumble bee as suitable food plant sources were observed onsite and in the vicinity of the Study Area. While the Study Area may provide suitable nest sites (e.g., abandoned rodent burrows) and hibernation sites for overwintering, the Study Area has had significant anthropogenic disturbance and site modifications (e.g., routine operations and maintenance of the airport). This species has the potential to forage and visit the Study Area but is not expected to overwinter or nest in the Project vicinity due to anthropogenic disturbance and significant habitat modifications. This species has a low potential to forage in the Study Area.
- **California tiger salamander** (*Ambystoma californiense*). The nearest occurrence is a 2007 record from 0.2 mile west of the Study Area on the CVH where a deceased salamander was found at the entrance of a burrow (CNDDB 2024a). No known breeding ponds are present within dispersal distance (1.3 miles) of the Study Area; however, unidentified ponds may be present. Annual grassland habitat in the Study Area provides potential refuge sites (small mammal burrows); however, refugia are limited due to ground squirrel control and disking. Taxiways and airport infrastructure would act as barriers to tiger salamander movement from the north and east of the Study Area, and roadways, airport infrastructure, and industrial development would present significant barriers to movement from the south and west. Although unlikely, there is a low potential for California tiger salamander to occur in underground refugia in annual grassland habitat within the Study Area, or to migrate through the site during winter rain events. Suitable breeding habitat (i.e., seasonal ponds) is not

present in the Study Area. California tiger salamanders are not expected to occur in the Study Area.

- **Western spadefoot** (*Spea hammondii*). The nearest CNDDB occurrence for western spadefoot is approximately 4.9 miles southeast of the Study Area. The Study Area does not provide breeding (aquatic) habitat but may provide marginally suitable upland habitat if any breeding pools are present within dispersal distance, which has been reported up to 650 meters (USFWS 2023). Annual grassland habitat in the Study Area provides potential refuge sites (small mammal burrows); however, refugia are limited due to ground squirrel control and disking. Although not expected, the species may occur in underground refugia in annual grassland habitat within Study Area.
- **Western burrowing owl** (*Athene cunicularia*). The nearest CNDDB occurrence for burrowing owl was recorded approximately 2.21 miles northwest of the Study Area (CDFW 2024a). The Study Area and surrounding undeveloped habitat contain suitable habitat elements to support burrowing owl, including ground squirrel burrows and foraging habitat. This species has the potential to forage in the Study Area but is unlikely to den or nest in the Study Area due to the anthropogenic disturbance within the CVH and significant habitat modifications from routine maintenance of disking of burrows and management for ground squirrels. No burrowing owls or potential dens (those with whitewash, feathers, pellets) were observed in the Study Area during the field survey, and the species is not expected to occur.
- **Swainson's hawk** (*Buteo swainsoni*) and **white-tailed kite** (*Elanus leucurus*). Swainson's hawk and white-tailed kite are both known to occur in the general region of the Study Area, with numerous foraging and fly-by observations documented in eBird (eBird 2024). However, the Study Area does not contain suitable nesting habitat for either species. There is one CNDDB record for Swainson's hawk displaying nesting behavior near Santa Ana Creek, 0.51 mile northeast of the Study Area. There are no documented nesting occurrences within 5 miles of the Study Area for white-tailed kite (CDFW 2024a). These species have the potential to forage and visit the Project area but no potential to nest in or immediately adjacent to the Study Area due to a lack of suitable nesting sites (trees).
- **American badger** (*Taxidea taxus*). The nearest CNDDB occurrence for American badger is approximately 3.2 miles southeast of the Study Area (CDFW 2024a). Although of marginal quality, the annual grassland habitat within the Study Area provides some suitable foraging habitat, with suitable prey species, including burrowing rodents and other small vertebrates, along with habitat for dens and burrows. Badgers are highly mobile and the species may move onto the site from adjacent areas. Due to the routine disturbance within the CVH and management for ground squirrels, there is a low potential for American badger to occur in the Project area and the species is not expected to occur.

3.4 Critical Habitat

No Critical Habitat is designated within the Study Area (USFWS 2024b, NMFS 2024b).

3.5 Potentially Jurisdictional Waters and Wetlands

No creeks or potentially jurisdictional waters of the U.S. or state subject to United States Army Corps of Engineers (USACE) or Regional Water Quality Control Board (RWQCB) jurisdiction were observed in the Study Area. No wetlands are present within the Study Area.

4 Discussion and Considerations

The Study Area includes 46.42 acres of non-native annual grassland habitat and 5.58 acres of developed land in the southwest corner of the CVH. Due to operations and maintenance activities at the airport, including monthly mowing and disking and ongoing ground squirrel control, special-status wildlife species occurrence in the Study Area is possible but unlikely. No special-status plants are anticipated to occur in the Study Area.

Special-status species determined to have some potential to occur within Project area are Crotch's bumble bee, western burrowing owl, Swainson's hawk (foraging only), white-tailed kite (foraging only), American badger, California tiger salamander, and western spadefoot. Additionally, nesting birds may occur in the annual grassland habitat or on structures (buildings) within the developed areas.

The following avoidance and minimization measures (AMMs) are recommended to avoid and minimize potential impacts to sensitive biological resources during Project implementation:

AMM 1: Conduct worker environmental training

Prior to the start of construction activities, all personal working on the site shall receive an environmental training by a qualified biologist. The training will include information on the special-status species that may occur in the work area, including identification, legal status, and project-required protective measures.

AMM 2: Minimize and delineate work limits

Temporary impact areas shall be kept to the minimum size necessary and, to the extent feasible, staging and laydown areas shall utilize existing paved areas. Prior to commencing construction activities, a qualified biologist will clearly delineate the work limits in the field with highly visible flagging or fencing.

AMM 3: Conduct pre-construction survey(s) for nesting birds

To avoid and minimize potential impacts to bird species protected by the Migratory Bird Treaty Act (MBTA) and F. & G. Code, construction activities should be scheduled, to the extent feasible, to avoid the nesting bird season. The typical nesting season extends from February 1 through August 31. If Project activities are scheduled to take place during the nesting season, the following measures are recommended:

- A qualified biologist shall conduct pre-construction surveys for nesting birds. These surveys shall be conducted no more than 7 days prior to the initiation of ground-disturbing or vegetation-disturbing activities. During these surveys, the biologist shall inspect all potential nesting habitats (e.g., shrubs, annual grasslands, and structures) in and immediately adjacent to the construction areas for nests.
- If an active nest is found sufficiently close to work areas to be disturbed by Project activities, a non-disturbance buffer zone shall be established around the nest. The size and location of the non-disturbance buffer shall be at the biologist's discretion based on the species, sensitivity to disturbance, and nest placement. Buffer zones shall remain in place until the birds have fledged or the nest is no longer active, as determined by a qualified biologist. Active bird nests cannot be relocated, disturbed, or destroyed under MBTA and F. & G. Code regulations.

- If construction activities are halted or paused for more than 7 days, the pre-activity survey shall be repeated to check for new nests that may have become established.

AMM 4: Conduct pre-construction survey(s) for burrowing owls

Prior to initiating ground-disturbing activities, surveys for burrowing owls shall be conducted in accordance with protocols established in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012 or current version). If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be resurveyed. If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the *Staff Report on Burrowing Owl Mitigation*, and at the discretion of a qualified wildlife biologist. Buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the breeding season, and 160 feet (100 meters) during the non-breeding season. Buffer distances shall be subject to the approval of CDFW.

If occupied burrows cannot be avoided, passive owl relocation techniques may be implemented outside of the nesting season. Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

If occupied burrows are relocated, the project proponent shall enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, the project proponent shall develop and implement a monitoring and management plan to assess the effectiveness of the mitigation. The plan shall be subject to the approval of CDFW.

AMM 5: Conduct pre-activity survey for Crotch's bumble bee

If ground-disturbing or vegetation-disturbing Project activities are conducted during the flight season/active period for Crotch's bumble bee (February through October), a pre-construction survey shall be conducted by a qualified biologist to search for active nest sites. Surveys shall be conducted within 14 days prior to ground- or vegetation-disturbing activities and shall be consistent with nesting survey recommendation in the CDFW *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (2023). If an active nest is detected, an appropriate no-disturbance buffer zone shall be established and site-specific measures to avoid take should be developed by a qualified biologist. If take of Crotch's bumble bee or its nest cannot be avoided, additional consultation with CDFW will be require to obtain a project-specific take permit.

AMM-6: Conduct biological monitoring during winter rain events

If present, special-status amphibians are most likely to be encountered during winter rain events when they may be migrating to breeding sites. Therefore, construction activities should be avoided during and within 24 hours after winter rain events (defined as 0.25 inch of rain or greater as reported by the National Oceanic and Atmospheric Administration). If construction activities are scheduled to occur during or within 24 hours after a rain event, they shall be monitored by a qualified biologist. The biologist shall inspect the work areas for

special-status amphibians throughout the work day. If any western spadefoot are found, a qualified biologist with appropriate CDFW authorization may relocate the animal to a suitable burrow outside of the project impact area footprint. If any California tiger salamanders are found a minimum 200-foot no-disturbance buffer shall be established around the animal. The qualified biologist shall have authority to implement additional prudent measures as necessary to protect the animal. The USFWS shall be contacted within 24 hours of any detection of California tiger salamander on site to determine appropriate steps.

AMM 7: Conduct ground-disturbance monitoring

A qualified biologist familiar with California tiger salamander and western spadefoot shall be present to monitor for special-status amphibians that may be unearthed during initial ground-disturbance (i.e., clearing, grubbing, grading) activities. The biologist shall have authority to stop work if either species is found during initial ground disturbance. If any western spadefoot are found, the qualified biologist with appropriate CDFW authorization may relocate the animal to a suitable burrow outside of the project impact area footprint. If any California tiger salamanders are found a minimum 200-foot no-disturbance buffer shall be established around the animal and further initial-ground disturbance activities in annual grassland habitat shall cease until the USFWS has been contacted to determine appropriate steps. The USFWS shall be contacted within 24 hours of any detection of California tiger salamander on site. .

AMM 8: Conduct pre-activity survey for American badger

Within 7 days prior to the start of project activities, including staging, a pre-activity survey for American badger shall be conducted by a qualified biologist. The survey shall include the work area plus a 50-foot buffer surrounding the work area. If an active American badger den is found, a no-disturbance buffer shall be placed by the qualified biologist. The buffer for an active American badger den during the breeding season (March-August) shall be a minimum of 50 feet based on the discretion of a qualified biologist. The buffer for an active American badger den during the non-breeding season shall be determined by the qualified biologist but may be less than 50 feet.

5 References

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Appendix A
Site Photographs

Appendix A. Site Photographs

Photo No. 1	Date: 7/30/2024
Location: 36.886945, -121.408534	
Description: Facing north, into non-native annual grassland area that is directly adjacent to graveled access road at northern terminus of Aerostar Way, adjacent to gated entrance to Hollister Municipal Airport (CVH).	

Photo No. 2	Date: 7/30/2024
Location: 36.888787, -121.406243	
Description: Study area facing west. Photo shows recently mowed non-native annual grassland area adjacent to runway/taxiway areas within CVH. Red line indicates location of runway/taxiway area within CVH.	

Appendix A. Site Photographs

Photo No. 3	Date: 7/30/2024
Location: 36.888033, -121.405558	
Description: Study area facing southeast. Photo shows ground squirrel burrows (marked in yellow) and recently mowed non-native annual grassland area adjacent to runway/taxiway areas within CVH. Red line indicates location of runway/taxiway area within CVH.	

Photo No. 4	Date: 7/30/2024
Location: 36.889350, -121.406812	
Description: Study area facing northwest. Photo shows recently mowed non-native annual grassland area adjacent to runway/taxiway areas within CVH. Area circled in yellow shows location of multiple ground squirrel burrows within Precision Approach Path Indicator (PAPI), Runways End Identifier Lights (REIL), Runway Visual Range (RVR), and adjacent to runway/taxiway area within CVH.	

Appendix A. Site Photographs

Photo No. 5	Date: 7/30/2024
Location: 36.889341, -121.406726	
Description: Study area facing north. Photo shows PAPI, REIL, RVR, and runway/taxiway area within CVH. Per CVH routine maintenance, ground squirrel burrows are managed per Federal Aviation Administration rules and regulations.	

Photo No. 6	Date: 7/30/2024
Location: 36.889728, -121.407164	
Description: Study area facing northwest. Photo shows non-native annual grassland area (recently mowed) in between runway/taxiway areas within CVH.	

Appendix A. Site Photographs

Photo No. 7	Date: 7/30/2024
Location: 36.890262, -121.408122	
Description: Southern boundary of the Study area facing northeast. Photo shows non-native annual grassland area (recently mowed) in between runway/taxiway areas within CVH.	

Photo No. 8	Date: 7/30/2024
Location: 36.889341, -121.406726	
Description: Northern boundary of the study area facing west. Photo shows runway/taxiway area, hangar buildings, and CAL FIRE Heliport area in the CVH.	

Appendix A. Site Photographs

Photo No. 9	Date: 7/30/2024
Location: 36.883962, -121.404067	
Description: Southwest boundary of the study area facing north. Photo shows disked and mowed non-native annual grassland area and graveled access road of Aerostar Way (on left).	

Photo No. 10	Date: 7/30/2024
Location: 36.889530, -121.409975	
Description: Northwestern boundary of the Study area facing west. Photo shows non-native annual grassland area and hangar/building on boundary of study area.	

Appendix A. Site Photographs

Photo No. 11	Date: 7/30/2024
Location: 36.889251, -121.409615	
Description: Northwestern boundary of the Study area facing southwest. Photo shows non-native annual grassland area and hangar/building on boundary of Study area. This section of non-native annual grassland had not been disked and mowed.	

Photo No. 12	Date: 7/30/2024
Location: 36.887498, -121.407121	
Description: Study area facing south. Photo shows remnant building within recently disked and mowed non-native annual grassland area.	

Appendix B
USFWS and CNDDB Species Lists

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Benito County, California

Local office

Ventura Fish And Wildlife Office

(805) 644-1766
(805) 644-3958
FW8VenturaSection7@FWS.Gov

2493 Portola Road, Suite B
Ventura, CA 93003-7726

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries)[2].

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
San Joaquin Kit Fox Vulpes macrotis mutica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Northwestern Pond Turtle Actinemys marmorata Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened

California Tiger Salamander Ambystoma californiense — Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2076

Foothill Yellow-legged Frog Rana boylii — Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5133

Western Spadefoot Spea hammondii — Proposed Threatened
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5425

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

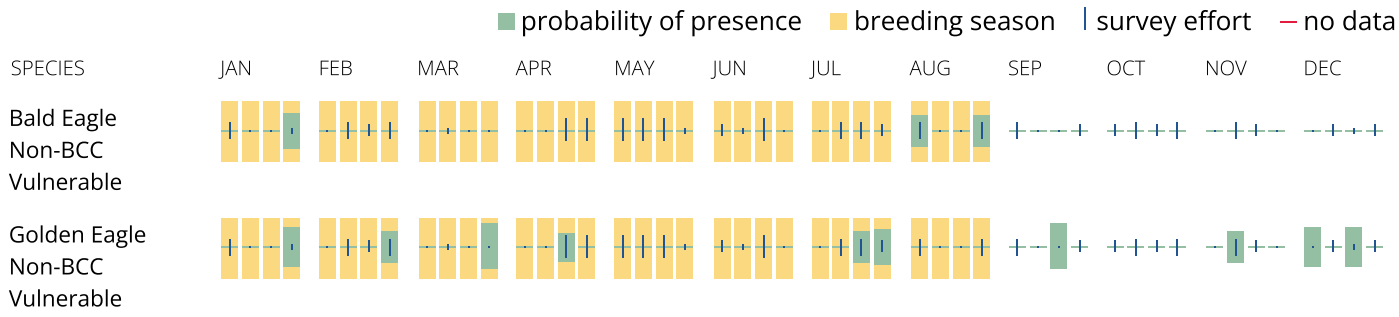
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31

Belding's Savannah Sparrow Passerculus sandwichensis beldingi — Breeds Apr 1 to Aug 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8

Bullock's Oriole Icterus bullockii — Breeds Mar 21 to Jul 25

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull Larus californicus — Breeds Mar 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Spinus lawrencei — Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Marbled Godwit Limosa fedoa — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Nuttall's Woodpecker Dryobates nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Santa Barbara Song Sparrow Melospiza melodia graminea This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/5513	Breeds Mar 1 to Sep 5
Short-billed Dowitcher Limnodromus griseus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

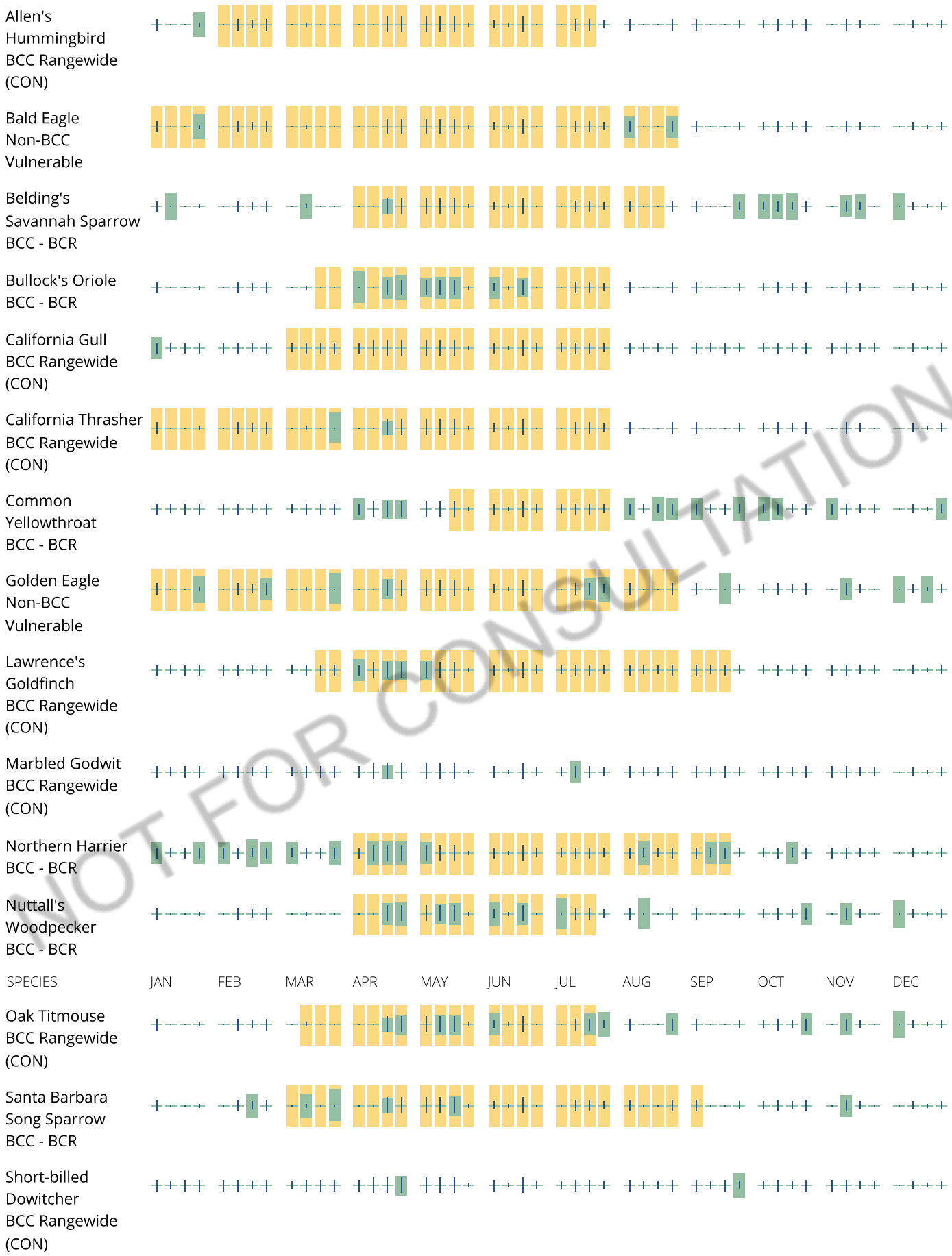
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

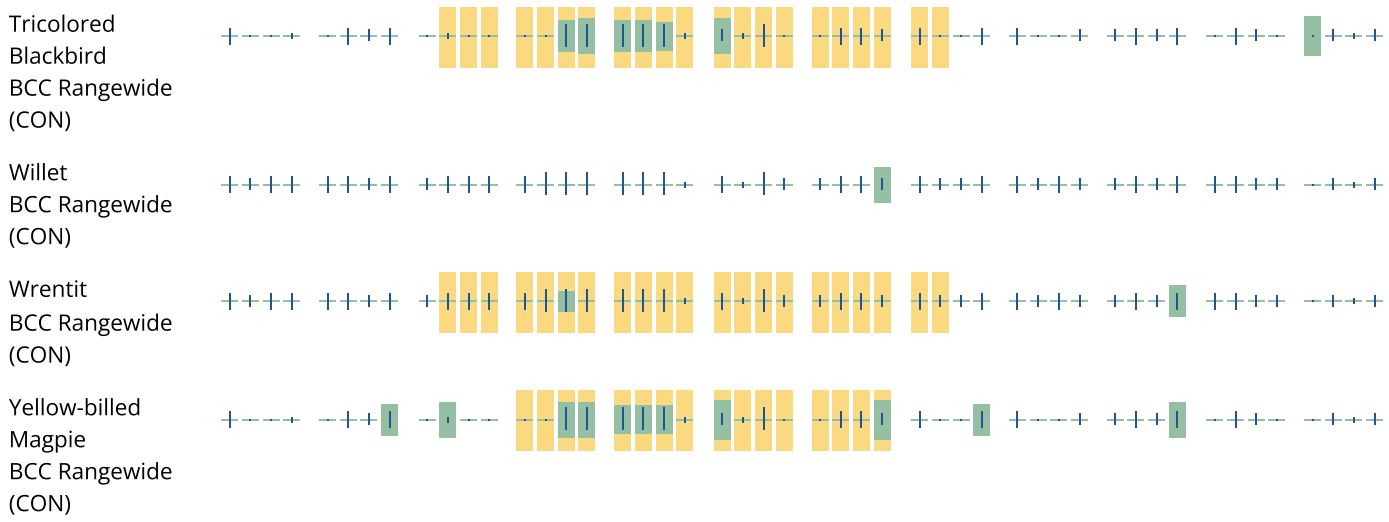
No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

■ probability of presence ■ breeding season | survey effort – no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a

starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Gilroy (3712115) OR Gilroy Hot Springs (3712114) OR Pacheco Peak (3712113) OR Chittenden (3612185) OR San Felipe (3612184) OR Three Sisters (3612183) OR San Juan Bautista (3612175) OR Tres Pinos (3612173))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Actinemys marmorata northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
Adela oplerella Opler's longhorn moth	IILEE0G040	None	None	G2	S2	
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Balsamorhiza macrolepis big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Castilleja rubicundula var. rubicundula pink creamsacs	PDSCR0D482	None	None	G5T2	S2	1B.2
Chorizanthe pungens var. pungens Monterey spineflower	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
Deinandra halliana Hall's tarplant	PDAST4R0C0	None	None	G3	S3	1B.2
Delphinium californicum ssp. interius Hospital Canyon larkspur	PDRAN0B0A2	None	None	G3T3	S3	1B.2
Dipodomys venustus venustus Santa Cruz kangaroo rat	AMAFD03042	None	None	G4T1	S1	
Dudleya abramsii ssp. setchellii Santa Clara Valley dudleya	PDCRA040Z0	Endangered	None	G4T2	S2	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Ericameria fasciculata Eastwood's goldenbush	PDAST3L080	None	None	G2	S2	1B.1
Eriogonum heermannii var. occidentale western Heermann's buckwheat	PDPGN082P6	None	None	G5T2	S2	1B.2
Eriogonum nortonii Pinnacles buckwheat	PDPGN08470	None	None	G2	S2	1B.3
Eryngium aristulatum var. hooveri Hoover's button-celery	PDAPI0Z043	None	None	G5T1	S1	1B.1
Euphydryas editha bayensis Bay checkerspot butterfly	IILEPK4055	Threatened	None	G4G5T1	S3	
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Falco mexicanus prairie falcon	ABNKD06090	None	None	G5	S4	WL
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Helminthoglypta sequoicola consors redwood shoulderband	IMGASC2421	None	None	G2T1	S1	
Hoita strobilina Loma Prieta hoita	PDFAB5Z030	None	None	G2?	S2?	1B.1
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lavinia exilicauda harengus Monterey hitch	AFCJB19013	None	None	G4T3	S3	SSC
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Lessingia micradenia var. glabrata smooth lessingia	PDAST5S062	None	None	G2T2	S2	1B.2
Malacothamnus aboriginum Indian Valley bushmallow	PDMAL0Q020	None	None	G3	S3	1B.2
Malacothamnus hallii Hall's bushmallow	PDMAL0Q0F0	None	None	G2	S2	1B.2
Monolopia gracilens woodland woollythreads	PDAST6G010	None	None	G3	S3	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Navarretia prostrata	PDPLM0C0Q0	None	None	G2	S2	1B.2
prostrate vernal pool navarretia						
North Central Coast Drainage Sacramento Sucker/Roach River	CARA2623CA	None	None	GNR	SNR	
North Central Coast Drainage Sacramento Sucker/Roach River						
Oncorhynchus mykiss irideus pop. 9	AFCHA0209H	Threatened	None	G5T2Q	S2	SSC
steelhead - south-central California coast DPS						
Optioservus canus	IICOL5E020	None	None	G2	S1	
Pinnacles optioservus riffle beetle						
Phrynosoma blainvillii	ARACF12100	None	None	G4	S4	SSC
coast horned lizard						
Plagiobothrys diffusus	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
San Francisco popcornflower						
Plagiobothrys glaber	PDBOR0V0B0	None	None	GX	SX	1A
hairless popcornflower						
Puccinellia simplex	PMPOA53110	None	None	G2	S2	1B.2
California alkali grass						
Rana boylii pop. 4	AAABH01054	Threatened	Endangered	G3T2	S2	
foothill yellow-legged frog - central coast DPS						
Rana draytonii	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California red-legged frog						
Ravenella exigua	PDCAM020A0	None	None	G2	S2	1B.2
chaparral harebell						
Riparia riparia	ABPAU08010	None	Threatened	G5	S3	
bank swallow						
Spea hammondii	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
western spadefoot						
Streptanthus albidus ssp. peramoenus	PDBRA2G012	None	None	G2T2	S2	1B.2
most beautiful jewelflower						
Sycamore Alluvial Woodland	CTT62100CA	None	None	G1	S1.1	
Sycamore Alluvial Woodland						
Taricha torosa	AAAAF02032	None	None	G4	S4	SSC
Coast Range newt						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger						
Trifolium hydrophilum	PDFAB400R5	None	None	G2	S2	1B.2
saline clover						
Vireo bellii pusillus	ABPBW01114	Endangered	Endangered	G5T2	S3	
least Bell's vireo						
Vulpes macrotis mutica	AMAJA03041	Endangered	Threatened	G4T2	S3	
San Joaquin kit fox						

Record Count: 60

CALIFORNIA NATIVE PLANT SOCIETY

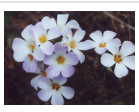
CNPS Rare Plant Inventory

Search Results

30 matches found. Click on scientific name for details

Search Criteria: County or Island is one of [**SBT**], 9-Quad include [**3612184:3612183:3712113:3712114:3612185:3712115:3612175:3612174:3612173**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Acanthomintha lanceolata	Santa Clara thorn-mint	Lamiaceae	annual herb	Mar-Jun	None	None	G4	S4	4.2	Yes	1974-01-01	 © 2005 Barry Breckling
Allium howellii var. *howellii*	Howell's onion	Alliaceae	perennial bulbiferous herb	Mar-Apr	None	None	G3G4T3	S3	4.3	Yes	2017-04-04	 © 2013 Neal Kramer
Arctostaphylos pajaroensis	Pajaro manzanita	Ericaceae	perennial evergreen shrub	Dec-Mar	None	None	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Astragalus tener var. *tener*	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	None	None	G2T1	S1	1B.2	Yes	1994-01-01	No Photo Available
Clarkia lewisii	Lewis' clarkia	Onagraceae	annual herb	(Feb)May-Jul	None	None	G4	S4	4.3	Yes	1980-01-01	No Photo Available
Deinandra halliana	Hall's tarplant	Asteraceae	annual herb	(Mar)Apr-May	None	None	G3	S3	1B.1	Yes	1974-01-01	No Photo Available
Delphinium californicum ssp. *interius*	Hospital Canyon larkspur	Ranunculaceae	perennial herb	Apr-Jun	None	None	G3T3	S3	1B.2	Yes	1984-01-01	No Photo Available
Eriastrum virgatum	virgate eriastrum	Polemoniaceae	annual herb	May-Jul	None	None	G3	S3	4.3	Yes	1974-01-01	No Photo Available
Eriogonum argillosum	clay buckwheat	Polygonaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	4.3	Yes	1974-01-01	No Photo Available
Eriogonum elegans	elegant wild buckwheat	Polygonaceae	annual herb	May-Nov	None	None	G4G5	S4S5	4.3	Yes	2011-12-19	No Photo Available

Eriogonum heermannii var. *occidentale*	western Heermann's buckwheat	Polygonaceae	perennial deciduous shrub	Jul-Oct	None	None	G5T2	S2	1B.2	Yes	1994-01-01	No Photo Available
Eriogonum nortonii	Pinnacles buckwheat	Polygonaceae	annual herb	(Apr)Aug(Sep)May-Jun	None	None	G2	S2	1B.3	Yes	1974-01-01	No Photo Available
Eriogonum nudum var. *indictum*	protruding buckwheat	Polygonaceae	perennial herb	(Apr)May-Oct(Dec)	None	None	G5T4	S4	4.2	Yes	1994-01-01	No Photo Available
Eriophyllum jepsonii	Jepson's woolly sunflower	Asteraceae	perennial herb	Apr-Jun	None	None	G3	S3	4.3	Yes	1974-01-01	No Photo Available
Eryngium aristulatum var. *hooveri*	Hoover's button-celery	Apiaceae	annual/perennial herb	(Jun)Jul(Aug)	None	None	G5T1	S1	1B.1	Yes	1984-01-01	No Photo Available
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	Yes	1988-01-01	No Photo Available
Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980-01-01	 © 2016 Aaron Schusteff
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2004 Carol W. Witham
Galium andrewsii ssp. *gatense*	phlox-leaf serpentine bedstraw	Rubiaceae	perennial herb	Apr-Jul	None	None	G5T3	S3	4.2	Yes	1994-01-01	 © 2021 Steve Matson
Isocoma menziesii var. *diabolica*	Satan's goldenbush	Asteraceae	perennial shrub	Aug-Oct	None	None	G3G5T3	S3	4.2	Yes	1994-01-01	No Photo Available
Leptosiphon ambiguus	serpentine leptosiphon	Polemoniaceae	annual herb	Mar-Jun	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2010 Aaron Schusteff
Leptosiphon grandiflorus	large-flowered leptosiphon	Polemoniaceae	annual herb	Apr-Aug	None	None	G3G4	S3S4	4.2	Yes	1994-01-01	 © 2003 Doreen L. Smith

Malacothamnus aboriginum	Indian Valley bushmallow	Malvaceae	perennial deciduous shrub	Apr-Oct	None	None	G3	S3	1B.2	Yes	1974-01-01	 © 2009 Keir Morse
Monolopia gracilens	woodland woollythreads	Asteraceae	annual herb	(Feb)Mar-Jul	None	None	G3	S3	1B.2	Yes	2010-04-06	 © 2016 Richard Spellenberg
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	2001-01-01	No Photo Available
Pinus radiata	Monterey pine	Pinaceae	perennial evergreen tree		None	None	G1	S1	1B.1		1974-01-01	No Photo Available
Plagiobothrys diffusus	San Francisco popcornflower	Boraginaceae	annual herb	Mar-Jun	None	CE	G1Q	S1	1B.1	Yes	1974-01-01	No Photo Available
Plagiobothrys glaber	hairless popcornflower	Boraginaceae	annual herb	Mar-May	None	None	GX	SX	1A	Yes	1974-01-01	No Photo Available
Ravenella exigua	chaparral harebell	Campanulaceae	annual herb	May-Jun	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	Yes	2001-01-01	 © 2005 Dean Wm Taylor

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Appendix C
Special-status Species Tables

The potential for each species to occur in the Project Area was assessed using the criteria outlined below.

None: the area contains a complete lack of suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.

Not Expected: suitable habitat or key habitat elements might be present but might be of poor quality or isolated from the nearest extant occurrences, and/or the species is not known to occur in the area.

Possible: presence of suitable habitat or key habitat elements that potentially support the species.

Present: the species was either observed directly or its presence was confirmed by field investigations or in previous studies in the area

Table C-1.Special-status Plant Species

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Study Area**
Arctostaphylos pajaroensis Pajaro manzanita	- / - / 1B.1	Chaparral (sandy). 30-760 m. Blooms December through March.	**None**. Suitable habitat is not present, and no manzanita shrubs were identified in the study area. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Astragalus tener var. *tener* alkali milk-vetch	- / - / 1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-168 meters. Blooms March through June.	**None**. Suitable habitat is not present in the study area. There have been no documented occurrences within 5 miles of the study area (CNDDB 2024) and species presumed Extirpated in San Benito County (CNPSP 2024).
Balsamorhiza macrolepis big-scale balsamroot	- / - / 1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Sometimes on serpentine. 35-1465 m. Blooms March through June.	**None.** Marginally **s**uitable grassland habitat is present in the study area. However, there have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Castilleja rubicundula var. *rubicundula* pink creamsacs	- / - / 1B.2	Coastal dunes, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Openings in chaparral or grasslands. On serpentine. 20-915 m. Blooms April through June.	**None.** Marginally suitable grassland habitat is present in the study area however, no serpentine soils are present. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Chorizanthe pungens var. *pungens* Monterey spineflower	FT / - / 1B.2	Coastal dunes, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Sandy soils in coastal dunes or more inland within chaparral or other habitats. 3-270 m. Blooms April through June.	**None.** Marginally suitable grassland habitat is present but suitable sandy soils are lacking in the study area. However, there have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Deinandra halliana Hall's tarplant	- / - / 1B.2	Cismontane woodland, chenopod scrub, valley and foothill grassland. Reported from a variety of substrates including clay, sand, and alkaline soils. 260-950 m. Blooms April through May.	**Not expected.** Marginally suitable grassland habitat is present in the study area. However, there have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Study Area**
Delphinium californicum ssp. *interius* Hospital Canyon larkspur	- / - / 1B.2	Cismontane woodland, chaparral, coastal scrub. In wet, boggy meadows, openings in chaparral and in canyons. 195-1095 m. Blooms April through June.	**None**. Suitable habitat is not present in the study area.
Dudleya abramsii ssp. *setchellii* Santa Clara Valley dudleya	FE / - / 1B.1	Valley and foothill grassland, cismontane woodland. On rocky serpentine outcrops and on rocks within grassland or woodland. 60-455 m. Blooms April through October.	**None.** Marginally suitable grassland habitat is present in the study area however no serpentine and/or rocky soils are present within the Project area. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024). Additionally, species not detected during July surveys.
Ericameria fasciculata Eastwood's goldenbush	- / - / 1B.1	Closed-cone coniferous forest, chaparral (maritime), coastal scrub, coastal dunes. In sandy openings. 30-215 m. Blooms July through October.	**None**. Suitable habitat is not present in the study area.
Eriogonum heermannii var. occidentale western Heermann's buckwheat	- / - / 1B.2	Openings in cismontane woodland. Often on serpentine alluvium or on roadsides; rarely on clay or shale slopes. 410-805 m. Blooms July through October.	**None.** Suitable habitat is not present in the study area and site is outside of known elevation range for this species.
Eriogonum nortonii Pinnacles buckwheat	- / - / 1B.3	Chaparral, valley and foothill grassland. Sandy soils; often on recent burns; western Santa Lucias. 90-975 m. Blooms May through June, August.	**None.** Marginally suitable grassland habitat is present in the study area. However, there have been no documented occurrences within 5 miles of the Project area (CNDDB 2024). No *Eriogonum* were detected during July surveys.
Eryngium aristulatum var. *hooveri* Hoover's button-celery	- / - / 1B.1	Vernal pools. Alkaline depressions, vernal pools, roadside ditches and other wet places near the coast. 1-50 m. Blooms April through October.	**None**. Suitable vernal pool and aquatic habitat is not present in the study area.

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Study Area**
Extriplex joaquinana San Joaquin spearscale	- / - / 1B.2	Chenopod scrub, alkali meadow, playas, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with *Distichlis spicata*, *Frankenia*, etc. 0-800 m. Blooms April through October.	**None**. Marginally suitable grassland habitat is present in the study area. Nearest CNNDB occurrence is from 1938 near Hollister airport (CNDDB 2024). Species persistence unlikely due to high level of disturbance within non-native grassland areas of CVH, (runways and taxiways are mowed and disked on a monthly basis). Species was not detected during July surveys.
Fritillaria liliacea fragrant fritillary	- / - / 1B.2	Coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland. 3-400 meters. Blooms February through April.	**Not expected.** Marginally suitable grassland habitat is present in the study area. However, there haven no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Hoita strobilina Loma Prieta hoita	- / - / 1B.1	Chaparral, cismontane woodland, riparian woodland. Serpentine; mesic sites. 60-975 meters. Blooms May through October.	**None.** Suitable habitat is not present in the study area.
Legenere limosa legenere	- / - / 1B.1	Vernal pools. In beds of vernal pools. 1-1005 m. Blooms April through June.	**None.** Suitable habitat is not present in the study area.
Lessingia micradenia var. *glabrata* smooth lessingia	- / - / 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Serpentine; often on roadsides. 90-490 m. Blooms July through November.	**None.** Marginally suitable grassland habitat is present in the study area however serpentine soils are lacking. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024). Species was not detected during July surveys.
Malacothamnus aboriginum Indian Valley bushmallow	- / - / 1B.2	Cismontane woodland, chaparral. Granitic outcrops and sandy bare soil, often in disturbed soils. 150-1130 m. Blooms April through October.	**None.** Suitable habitat is not present in the study area.
Malacothamnus hallii Hall's bushmallow	- / - / 1B.2	Chaparral, coastal scrub. Some populations on serpentine. 10-735 m. Blooms May through September.	**None.** Suitable habitat is not present in the Study area.

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Study Area**
Monolopia gracilens woodland woollythreads	- / - / 1B.2	Chaparral, valley and foothill grassland, cismontane woodland, broadleafed upland forest, north coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns but may have only weak affinity to serpentine. 100-1,200 m. Blooms February through July.	**None.** Marginally suitable grassland habitat is present in the study area. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024). Species not detected during July survey.
Navarretia prostrata prostrate vernal pool navarretia	- / - / 1B.2	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps. Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3-1235 m. Blooms April through July.	**None.** Suitable habitat is not present in the study area.
Pinus radiata Monterey pine	- / - / 1B.1	Closed-cone coniferous forest, cismontane woodland. 25-185 m.	**None.** Suitable habitat is not present in the study area. Only native stands of Monterey pine are considered special-status.
Plagiobothrys diffusus San Francisco popcornflower	- / SE / 1B.1	Valley and foothill grassland, coastal prairie. Historically from grassy slopes with marine influence. 45-360 meters. Blooms March through June.	**Not expected.** Marginally suitable grassland habitat is present in the study area. However, there have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Plagiobothrys glaber hairless popcornflower	- / - / 1A	Meadows and seeps, marshes and swamps. Coastal salt marshes and alkaline meadows. 5-180 meters. Blooms March through May.	**None.** Suitable habitat is not present in the study area. One extirpated occurrence from 1954 within the north area of CVH.
Puccinellia simplex California alkali grass	- / - / 1B.2	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools. Alkaline, vernally mesic. Sinks, flats, and lake margins. 1-915 m.	**None.** Annual grassland habitat on site lacks vernally mesic (moist) areas with alkaline soils. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Ravenella exigua chaparral harebell	- / - / 1B.2	Chaparral. Rocky sites, usually on serpentine in chaparral. 90-1375 m. Blooms May through June.	**None**. Suitable habitat is not present in the study area.

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Study Area**
Streptanthus albidus ssp. *peramoenus* most beautiful jewel flower	- / - / 1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Serpentine outcrops, on ridges and slopes. 90-1040 m. Blooms April through September.	**None.** Marginally suitable grassland habitat is present in the study area however serpentine soils are lacking. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024). Species not detected during July surveys.
Trifolium hydrophilum saline clover	- / - / 1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 0-300 meters. Blooms April through June.	**None.** Annual grassland habitat on site lacks vernally mesic (moist) areas with alkaline soils. Nearest CNDDB occurrence is on Bolsa Road approximately 4.81 miles north of Project area (2024), however suitable habitat is not present in the study area.

* List of Abbreviations for Species Status follow below:
FE = Federal endangered
FT = Federal threatened
FC = Federal Candidate
SC = State Candidate
SE = State Endangered (California)
ST = State Threatened (California)
SR = State Rare (California)
SCC = Species of Special Concern
FP= Fully Protected

Source: California Department of Fish and Wildlife. 2024. California Natural Diversity Database (CNDDB)

CA Rare Plant Rank
1A = Plants presumed extinct in California and rare/extinct elsewhere
1B.1 = Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California
1B.2 = Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California
1B.3 = Plants rare, threatened, or endangered in California and elsewhere; not very threatened in California
2B.2 = Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California

Table C-2. Special-status Animal Species

Scientific Name **Common Name**	**Listing status* (Federal/ State)**	**Habitat Association**	**Potential to Occur in the Study Area**
Invertebrates			
Bombus crotchii Crotch bumble bee	- / SCE	Coastal areas east to the Sierra-Cascade crest and south into Mexico. Food plant include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum*.	**Not expected.** Marginally suitable foraging habitat present onsite and vicinity of the study area, and the study area is within its current range (CDFW 2024). Food (i.e flowering plant) resources limited due to regular mowing and disking. Overwintering and nesting sites (primarily burrows) limited due to routing disking and management of ground squirrels. No records occur within 5 miles of the Project area (CNDDB 2024; Xerces et al 2021). No *Bombus* were observed during site survey in July. This species has the potential to forage and visit the Project area but is not expected to overwinter or nest in the Project vicinity due to anthropomorphic disturbance and significant habitat modifications. Thus, limiting the species potential to occur within the Project area.
Branchinecta lynchi vernal pool fairy shrimp	FT/ -	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**None**. No vernal pools or seasonal aquatic habitat is present in the study area.
Euphydryas editha bayensis Bay checkerspot butterfly	FT / -	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. *Plantago erecta* is the primary host plant; *Orthocarpus densiflorus* and *O. purpurscens* are the secondary host plants.	**None.** Suitable habitat (native grasslands) and serpentine soils are not present in the study area. The current range of this species is restricted to Santa Clara County (USFWS 2009).

Scientific Name Common Name	Listing status* (Federal/ State)	Habitat Association	Potential to Occur in the Study Area
Amphibians			
Ambystoma californiense pop.1 California tiger salamander - central California DPS	FT / ST	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding. Average upland dispersal from breeding sites is 1,844 feet (562 meters) (Searcy and Shaffer 2011); maximum dispersal has been documented up to 1.3 miles (Orloff 2007)	**Not expected.** Suitable breeding habitat (i.e., seasonal ponds) is not present in the study area, however annual grassland may provide marginally suitable upland habitat. The nearest occurrence is a 2007 record from 0.2 mile west of the study area on the CVH where a deceased salamander was found at the entrance of a burrow (CNDDB 2024). No known breeding ponds are present within dispersal distance (1.3 miles) of the study area, however unidentified ponds may be present. Annual grassland habitat in study area provides potential refuge site (small mammal burrows) however refugia are limited due to ground squirrel control and monthly disking and frequent rodenticide administered. Taxiways and airport infrastructure would act as barriers to tiger salamander movement from the north and east of the Study Area, and roadways, airport infrastructure, and industrial development would also present significant barriers to movement from the south and west. Although unlikely, there is a low potential for California tiger salamander to occur in underground refugia in annual grassland habitat within study area, or to migrate through the site during winter rain event. Suitable breeding habitat (i.e., seasonal ponds) are not present in the study area. California tiger salamander is not expected to occur in the Study Area.

Scientific Name **Common Name**	**Listing status* (Federal/ State)**	**Habitat Association**	**Potential to Occur in the Study Area**
Rana boylii *pop.4* foothill yellow-legged frog	FT / ST	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	**None.** Suitable habitat is not present in the study area. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Rana draytonii California red-legged frog	FT / SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	**None**. No aquatic habitat is present in or immediately adjacent to the study area. Study area is not situated between known breeding sites and does not provide a migratory corridor. Nearest known occurrence is 2.7 miles southeast of the study area, adjacent to Santa Ana Creek.
Spea hammondii Western Spadefoot	PT / SSC	Historical range of extends from Shasta County in north, to northern Baja California, Mexico. In California, ranges throughout the Central Valley, the Coast Ranges, and coastal lowlands from San Francisco Bay southward to Mexico. Have been found at sites from sea level up to 1,385 meters (in the Sierra Nevada foothills (Stebbins and McGinnis 2012). . Primarily terrestrial, living in underground burrows. Require seasonal pools and ponds to breed. Larval development occurs in 3-11 weeks, depending on conditions. Occur in open grasslands, scrubs, or mixed woodland and grassland within dispersal distance of breeding pools. Dispersal has been recorded up to 650 meters (USFWS 2023).	**Not expected.** Breeding (aquatic) habitat is not present in or immediately adjacent to the study area. Non-native annual grassland provides marginally suitable upland habitat but may be limited to no breeding pools in within dispersal distance. Nearest CNDDB occurrences are approximately 4.9 miles southeast (CNDDB 2024). Annual grassland habitat in study area provides potential refuge site (small mammal burrows) however refugia are limited due to ground squirrel control and disking. Although unlikely, species may occur in underground refugia in annual grassland habitat within study area.
Taricha torosa Coast Range newt	- / SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate over 1 km to breed in ponds, reservoirs and slow-moving streams.	**None.** Suitable habitat is not present in the study area. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Reptiles			

Scientific Name **Common Name**	**Listing status* (Federal/ State)**	**Habitat Association**	**Potential to Occur in the Study Area**
Actinemys marmorata Northwestern pond turtle	PT / SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**None**. Permanent aquatic sources and habitat is not present in or adjacent to the study area.
Phrynosoma blainvillii coast horned lizard	- / SSC	Chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert wash, pinon & juniper woodlands, riparian scrub, riparian woodland, valley & foothill grassland. Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**None.** Suitable habitat is not present in the study area. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Fish			
Lavinia exilicauda harengus Monterey hitch	- / SSC	Aquatic, Klamath/north coast flowing waters, Klamath/north coast standing waters, riparian forest	**None.** Suitable habitat is not present in the study area.
Oncorhynchus mykiss irideus pop. 9 steelhead - central California coast DPS	FT / -	DPS includes all naturally spawned populations of steelhead (and their progeny) in streams from the Russian River to Aptos Creek, Santa Cruz County, California (inclusive). Also includes the drainages of San Francisco and San Pablo Bays.	**None.** Suitable habitat is not present in the study area.
Birds			
Agelaius tricolor tricolored blackbird	- / ST	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**None.** Suitable habitat is not present in or adjacent to the study area.

Scientific Name **Common Name**	**Listing status* (Federal/ State)**	**Habitat Association**	**Potential to Occur in the Study Area**
Aquila chrysaetos golden Eagle	- / FP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**None (nesting) Not Expected (foraging).** Suitable foraging habitat is present, but study area lacks suitable nesting habitat. There have been no documented nesting occurrences within 5 miles of the Project area (CNDDB 2024).
Athene cunicularia Burrowing Owl	- / SC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Not expected.** Annual grassland provides marginally suitable habitat for foraging and nesting. Nearest CNDDB occurrence is present on Hudner Lane approximately 2.2 miles northwest of Project area (2024). Routine mowing, disking, and ground squirrel management reduce availability of potential burrows. Suitable habitat occurs south of the study area and species may forage and visit the Project area but are not expected to overwinter or nest in the study area.
Buteo swainsoni Swainson's hawk	- / ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**None (nesting) Not Expected (foraging).** Suitable foraging habitat is present in the study area. Nearest CNDDB occurrence of breeding behavior is from the vicinity of Santa Ana Creek approximately 0.51-mile northeast of the study area (2024). However, suitable nesting sites (mature trees) are absent within and immediately adjacent to the study area.
Elanus leucurus white-tailed kite	- / FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**None (nesting) Not Expected (foraging).** Suitable foraging is present in the study area. However, suitable nesting habitat is absent from Project area. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).

Scientific Name **Common Name**	**Listing status* (Federal/ State)**	**Habitat Association**	**Potential to Occur in the Study Area**
Gymnogyps californianus California Condor	FE / SE	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	**None.** Suitable habitat is not present in the study area.
Haliaeetus leucocephalus bald eagle	FD/ SE, FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	**None.** Suitable habitat is not present in the study area.
Riparia riparia bank swallow	- / ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	**None.** No suitable habitat in the study area. Species requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole. There have been no documented occurrences within 5 miles of the Project area (CNDDB 2024).
Vireo bellii pusillus Least Bell's Vireo	FE / SE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	**None.** Suitable habitat is not present in the study area.
Mammals			
Antrozous pallidus pallid bat	- / SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**None.** Suitable foraging and roosting habitat is absent from the study area. High level of disturbance in and around study area would impede maternal roosts. There are no documented occurrences of species within 10 miles of the study area.

Scientific Name **Common Name**	**Listing status* (Federal/ State)**	**Habitat Association**	**Potential to Occur in the Study Area**
Corynorhinus townsendii Townsend's big-eared bat	- / SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Require cavern-like sites for roosting, may roost in abandoned buildings. Roosting sites limiting. Extremely sensitive to human disturbance.	**None.** Suitable foraging and roosting habitat is absent from the study area. Nearest known occurrence is historic (1946) record reported from 7.5 miles north.
Taxidea taxus American badger	- / SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Not expected.** Marginally suitable habitat is present within grassland areas of the study area, the vicinity of CVH. The study area provides suitable habitat for hunting in grasslands that include burrowing rodents and other small vertebrates. Nearest occurrence is in Fairview Road approximately ~3.21 miles southeast of study area (CNDDB 2024). However, non-native annual grassland areas within the runways and taxiways within of the CVH are mowed and disked, along with mammal burrows are also disked and managed for ground squirrels on a monthly basis as part of the routine operations and maintenance of the airport. This species has the potential to forage and visit the Project area but are not expected to overwinter or nest in the Project vicinity due to anthropomorphic disturbance and significant habitat modifications. Thus, limiting the species potential to occur within the Project area.
Vulpes macrotis mutica San Joaquin kit fox	FE / ST	Chenopod scrub, and valley & foothill grassland. Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	**None.** Suitable den sites absent from study area. Major roadways and California State Highways in Vicinity of Project area act as a barrier to

Scientific Name Common Name	Listing status* (Federal/ State)	Habitat Association	Potential to Occur in the Study Area
			movement between the Project area and suitable habitats in the Hollister area. Additionally, high levels of human disturbance associated with airport operations would deter kit fox from using habitats within the Project area and vicinity.

*** List of Abbreviations for Federal and State Species Status follow below:** **FE = Federal endangered** **PE = Federal proposed endangered** **PT = Federal proposed threatened** **FT = Federal threatened** **FC = Federal candidate** **FTC= Federal candidate threatened**	**SE = State endangered** **ST = State threatened** **SCE = State candidate endangered** **SC = State candidate** **SSC = Species of special concern (CDFW)** **FP = Fully protected (CDFW)**
Source: California Department of Fish and Wildlife. 2024. California Natural Diversity Database (CNDDB)	

References:

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Appendix D
Plant Species List

Appendix D. Plant Species Observed

Scientific name	Common name	Native Species
Atriplex patula	fat hen	Yes
Avena barbata	slim oat	No*
Avena fatua	wild oat	No*
Beta vulgaris	Swiss chard	No
Brassica campestris	field mustard	No
Brassica rapa	black mustard	No*
Bromus hordeaceus	soft brome	No*
Carduus pycnocephalus	Italian thistle	No*
Centaurea solstitialis	yellow star thistle	No*
Centromadia pungens ssp. *pungens*	common tarweed	Yes
Cichorium intybus	chicory	No
Cirsium vulgare	bull thistle	No
Cressa truxillensis	spreading alkaliweed	Yes
Convolvulus arvensis	field bindweed	No
Conyza bonariensis	hairy fleabane	No
Dittrichia graveolens	stinkwort	No*
Elymus caput-medusae	medusahead	No*
Epilobium ciliatum ssp. *ciliatum*	slender willow herb	Yes
Epilobium ciliatum	fringed willowherb	Yes
Erigeron canadensis	horseweed	Yes
Eschescholzia californica	California poppy	Yes
Helminthotheca echioides	bristly ox-tongue	No*
Heterotheca grandiflora	telegraphweed	Yes
Hordeum murinum ssp. *leporinum*	hare barley	No*
Hordeum murinum	foxtail barely	No
Hypochaeris sp.	smooth cat's ear	No*
Lactuca serriola	prickly lettuce	No
Lotus corniculatus	bird's-foot trefoil	No
Malvella leprosa	akali mallow	Yes
Malva parviflora	cheeseweed	No
Medicago polymorpha	bur clover	No*
Plantago major	greater plantain	No
Plantago major	common plantain	No
Raphanus raphanistrum	wild radish	No*
Rumex crispus	curly dock	No*
Rumex sp.	dock	
Silybum marinum	milk thistle	No*
Xanthium strumarium	rough cocklebur	Yes
* = invasive (Cal-IPC rating)		

References:

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Appendix D

Energy Calculations

Construction Fuel Consumption	Gasoline (Gallons)	Diesel (Gallons)	Natural Gas (kBtu)	Electricity (kWhr)
Funded Construction Phase	15,275	40,474		14,200.41
Unfunded Construction Phase	284	6,961		263.83
Total For Construction	**15,558**	**47,434**	**-**	**14,464**

Annual Project Fuel Consumption	Jet Fuel (Metric Tons	Diesel (Gallons)	Natural Gas (kBtu)	Electricity (kWhr)
Funded Operation	652	56,328	918,635	603,950
Unfunded Operation			723,973	277,744
Total for Annual Operation	**652**	**56,328**	**1,642,607**	**881,693**

Operational consumption is from the CalEEMod file.

Unfunded Construction Vehicles

										Gasoline		Diesel		Electricity		
	Phase	Vehicle Type	Construction Phase Days	Trips Per Day	Total Trips	Miles Per Trip	Total Miles	Fuel Type	Weighted Fuel Economy (miles/gallon)	Weighted Fuel Economy (miles/gallon) hybrid	Fuel Consumption (gallons)	Weighted Fuel Economy (miles/gallon)	Fuel Consumption (gallons)	Weighted Fuel Economy (miles/kWhr)	Weighted Fuel Economy (miles/kWhr) hybrid	Electricity ocnsumption (kWhr)
		Worker	1	5	5	12.29	61	LDA,LDT1, LDT2	28.40828371	28.64152484	2.02	36.25192231	0.00	2.950526	3.310931518	1.88
		Vendor	1	1	1	7.57	8	HHDT, MHDT				7.582998587	1			
		Hauling	1	1	1	20	20	HHDT				6.318189288	3			
	Site Preparation	Onsite	1	3		10										
		Worker	2	7.5	15	12.29	184	LDA,LDT1, LDT2	28.40828371	28.64152484	6.06	36.25192231	0.01	2.950526	3.310931518	5.64
		Vendor	2	1	2	7.57	15	HHDT, MHDT				7.582998587	2			
		Hauling	2	1	2	20	40	HHDT				6.318189288	6			
	Grading	Onsite	2	3	6	10	60									
		Worker	100	6.82292	682.292	12.29	8,385	LDA,LDT1, LDT2	28.40828371	28.64152484	275.71	36.25192231	0.49	2.950526	3.310931518	256.32
		Vendor	100	3.4043669	340.43669	7.57	2,577	HHDT, MHDT				7.582998587	340			
		Hauling	100	1	2	20	40	HHDT				6.318189288	6			
	Building Construction	Onsite	100	3		10										
		Worker	5	17.5	87.5	12.29	1,075	LDA,LDT1, LDT2	28.40828371	28.64152484	35.36	36.25192231	0.06	2.950526	3.310931518	32.87
		Vendor	5	1	5	7.57	38	HHDT, MHDT				7.582998587	5			
		Hauling	5	1	5	20	100	HHDT				6.318189288	16			
	Paving	Onsite	5	3		10										
		Worker	5	1.364584	6.82292	12.29	84	LDA,LDT1, LDT2	28.40828371	28.64152484	2.76	36.25192231	0.00	2.950526	3.310931518	2.56
		Vendor	5	1	5	7.57	38	HHDT, MHDT				7.582998587	5			
		Hauling	5	3	15	20	300	HHDT				6.318189288	47			
	Architectural Coating	Onsite	5	3	15	10	150									
										Total Fuel Consumption (Gallons)		283.79		359.18		263.83

Notes:

1. Fuel Consumption is total miles multiplied by the percent gasoline or diesel respectively and then divided by fuel economy. It was assumed all MHDT and HHDT are diesel. LDA, LDT1, and LDT2 were assumed to be a

	LDA,LDT1,LDT2	MHDT	HHDT
Gasoline %	90.45%	0	0
Diesel %	0.21%	1	1
Electric %	6%		
Hybrid %	3%		

Funded Construction Vehicles

										Gasoline		Diesel		Electricity		
	Phase	Vehicle Type	Construction Phase Days	Trips Per Day	Total Trips	Miles Per Trip	Total Miles	Fuel Type	Weighted Fuel Economy (miles/gallon)	Weighted Fuel Economy (miles/gallon) hybrid	Fuel Consumption (gallons)	Weighted Fuel Economy (miles/gallon)	Fuel Consumption (gallons)	Weighted Fuel Economy (miles/kWhr)	Weighted Fuel Economy (miles/kWhr) hybrid	Electricity ocnsumption (kWhr)
		Worker	20	140	2800	12.29	34,412	LDA,LDT1, LDT2	28.40828371	28.64152484	1,131.45	36.25192231	2.00	2.950526	3.310931518	1,051.88
		Vendor	20	2	40	7.57	303	HHDT, MHDT				7.582998587	40			
		Hauling	20	4.7	94	20	1,880	HHDT				6.318189288	298			
	Site Preparation	Onsite	20	3		10										
		Worker	20	140	2800	12.29	34,412	LDA,LDT1, LDT2	28.40828371	28.64152484	1,131.45	36.25192231	2.00	2.950526	3.310931518	1,051.88
		Vendor	20	2	40	7.57	303	HHDT, MHDT				7.582998587	40			
		Hauling	20	0	0	20	-	HHDT				6.318189288	-			
	Grading	Onsite	20	3	60	10	600									
		Worker	230	140	32200	12.29	395,738	LDA,LDT1, LDT2	28.40828371	28.64152484	13,011.71	36.25192231	23.03	2.950526	3.310931518	12,096.65
		Vendor	230	8.3325	1916.475	7.57	14,508	HHDT, MHDT				7.582998587	1,913			
		Hauling	230	5	2	20	40	HHDT				6.318189288	6			
	Building Construction	Onsite	230	3		10										
		Worker	20	140	2800	12.29	34,412	LDA,LDT1, LDT2	28.40828371	28.64152484	1,131.45	36.25192231	2.00	2.950526	3.310931518	1,051.88
		Vendor	20	0	0	7.57	-	HHDT, MHDT				7.582998587	-			
		Hauling	20	17	340	20	6,800	HHDT				6.318189288	1,076			
	Paving	Onsite	20	3		10										
		Worker	15	140	2100	12.29	25,809	LDA,LDT1, LDT2	28.40828371	28.64152484	848.59	36.25192231	1.50	2.950526	3.310931518	788.91
		Vendor	15	2	30	7.57	227	HHDT, MHDT				7.582998587	30			
		Hauling	15	0	0	20	-	HHDT				6.318189288	-			
	Architectural Coating	Onsite	15	3	45	10	450									
										Total Fuel Consumption (Gallons)	15,274.62		2,323.97			14,200.41

Notes:

1. Fuel Consumption is total miles multiplied by the percent gasoline or diesel respectively and then divided by fuel economy. It was assumed all MHDT and HHDT are diesel. LDA, LDT1, and LDT2 were assumed to be a

	LDA,LDT1,LDT2	MHDT	HHDT
Gasoline %	90.45%	0	0
Diesel %	0.21%	1	1
Electric %	6%		
Hybrid %	3%		

Funded Construction Equipment

Phase name	Offroad Equipment Type	Amount	Days in Phase	Usage Hours	Horse Power	Load Factor	Fuel Consumption Rate lb/hp-hr	Diesel Fuel Consumption (gallons)
Site Preparation	Rubber Tired Dozers	2	20	8	200	0.4	0.367	1,322
Site Preparation	Excavators	2	20	8	300	0.37	0.367	1,834
Grading	Excavators	3	20	8	300	0.38	0.367	2,825
Grading	Rubber Tired Dozers	2	20	8	200	0.4	0.367	1,322
Grading	Scrapers	2	20	8	423	0.48	0.367	3,354
Building Construction	Cranes	1	230	7	367	0.29	0.367	8,846
Building Construction	Forklifts	3	230	8	82	0.2	0.408	5,196
Building Construction	Generator Sets	1	230	8	14	0.74	0.408	1,094
Building Construction	Tractors/Loaders/Backhoes	3	230	7	84	0.37	0.408	8,616
Building Construction	Welders	1	230	8	46	0.45	0.408	2,186
Paving	Pavers	2	20	8	81	0.42	0.408	625
Paving	Paving Equipment	2	20	8	89	0.36	0.408	588
Paving	Rollers	2	20	8	36	0.38	0.408	251
Architectural Coating	Air Compressors	1	15	6	37	0.48	0.408	92
Total Diesel Fuel Use from Construction Off-Road								38,150

1. Equipment list is from CalEEMod.
2. Fuel Consumption is 0.408 for less than 100 hp and .367 if greater than or equal to 100 hp based on CARB Off-Road Diesel Engine Emission Factors
3. To convert to gallons the conversion factor of 7.1089 lb/gallon is used
4. Fuel consumption is amount multiplied by usage hours, days in phase, horsepower, loadfactor, and fuel consumption rate divided by conversion factor.

Unfunded Construction Equipment

Phase name	Offroad Equipment Type	Amount	Days in Phase	Usage Hours	Horse Power	Load Factor	Fuel Consumption Rate lb/hp-hr	Diesel Fuel Consumption (gallons)
Site Preparation	Graders	1	1	8	148	0.41	0.367	25
Site Preparation	Tractors/Loaders/Backhoes	1	1	8	84	0.37	0.408	14
Grading	Graders	1	2	6	148	0.41	0.367	38
Grading	Rubber Tired Dozers	1	2	6	367	0.4	0.367	91
Grading	Tractors/Loaders/Backhoes	1	2	7	84	0.37	0.408	25
Building Construction	Cranes	1	100	4	367	0.29	0.367	2,198
Building Construction	Forklifts	2	100	6	82	0.2	0.408	1,129
Building Construction	Tractors/Loaders/Backhoes	2	100	8	84	0.37	0.408	2,854
Paving	Cement and Mortar Mixers	4	5	6	10	0.56	0.408	39
Paving	Pavers	1	5	7	81	0.42	0.408	68
Paving	Rollers	1	5	7	36	0.38	0.408	27
Paving	Tractors/Loaders/Backhoes	1	5	7	84	0.37	0.408	62
Architectural Coating	Air Compressors	1	5	6	37	0.48	0.408	31
Total Diesel Fuel Use from Construction Off-Road								6,602

1. Equipment list is from CalEEMod.
2. Fuel Consumption is 0.408 for less than 100 hp and .367 if greater than or equal to 100 hp based on CARB Off-Road Diesel Engine Emission Factors
3. To convert to gallons the conversion factor of 7.1089 lb/gallon is used
4. Fuel consumption is amount multiplied by usage hours, days in phase, horsepower, loadfactor, and fuel consumption rate divided by conversion factor.

			Weighting					Fuel Economy (miles per gallon or miles per kilowatt hour)					Weighted Fuel Economy	Weighted Fuel Economy
			LDA	LDT1	LDT2	MHDT	HHDT	LDA	LDT1	LDT2	MHDT	HHDT	Miles per Gallon	Miles per kilowatt hours
	Worker	LDA, LDT1,LDT2	0.5	0.25	0.25	0	0	31.20802478	25.65373	25.56336			28.40828371	
	Vendor	HHDT,MHDT	0	0	0	0.5	0.5							
Gasoline	Hauling	HHDT	0	0	0	0	1							
	Worker	LDA, LDT1,LDT2	0.5	0.25	0.25	0	0	43.20419628	24.72051	33.87879			36.25192231	
	Vendor	HHDT,MHDT	0	0	0	0.5	0.5				8.847808	6.318189288	7.582998587	
Diesel	Hauling	HHDT	0	0	0	0	1					6.318189288	6.318189288	
	Worker	LDA, LDT1,LDT2	0.5	0.25	0.25	0	0	3.310931518	2.59012	2.59012				2.950525637
	Vendor	HHDT,MHDT	0	0	0	0	0							
Electric	Hauling	HHDT	0	0	0	0	0							
	Worker (gasoline part)		0.5	0.25	0.25	0	0	28.75789399	28.5619	28.48842			28.64152484	
	Worker (electric part)	LDA, LDT1,LDT2	0.5	0.25	0.25	0	0	3.310931518	3.310932	3.310932				3.310931518
	Vendor	HHDT,MHDT	0	0	0	0	0							
Hybrid	Hauling	HHDT	0	0	0	0	0							

Notes:
1. It was assumed all MHDT and HHDT are diesel. LDA, LDT1, and LDT2 were assumed to be a mix of gasoline, diesel, electric or hybrid as ratioed by their VMT.
2. EMFAC 2021 was used to estimate fuel economy based on VMT and fuel consumption.

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Statewide
Region: California
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Co	Fuel Consumption
Statewide	2027	HHDT	Aggregate	Aggregate	Gasoline	90.74515	2535086	2535086	0	593710.7	0	615.5242
Statewide	2027	HHDT	Aggregate	Aggregate	Diesel	330234.7	1.4E+10	1.4E+10	0	1.68E+09	0	2209942
Statewide	2027	HHDT	Aggregate	Aggregate	Electricity	5656.524	2.14E+08	0	2.14E+08	26001597	3.91E+08	0
Statewide	2027	LDA	Aggregate	Aggregate	Gasoline	12713197	1.73E+11	1.73E+11	0	2.04E+10	0	5536771
Statewide	2027	LDA	Aggregate	Aggregate	Diesel	34811	3.57E+08	3.57E+08	0	50674314	0	8255.351
Statewide	2027	LDA	Aggregate	Aggregate	Electricity	945896.6	1.53E+10	0	1.53E+10	1.61E+09	5.92E+09	0
Statewide	2027	LDA	Aggregate	Aggregate	Plug-in Hyb	432800	6.77E+09	3.15E+09	3.62E+09	6.21E+08	1.09E+09	109477.6
Statewide	2027	LDT1	Aggregate	Aggregate	Gasoline	1225903	1.45E+10	1.45E+10	0	1.85E+09	0	564831.9
Statewide	2027	LDT1	Aggregate	Aggregate	Diesel	249.3117	1201565	1201565	0	240513.7	0	48.606
Statewide	2027	LDT1	Aggregate	Aggregate	Electricity	5171.971	83094138	0	83094138	8771438	32081195	0
Statewide	2027	LDT1	Aggregate	Aggregate	Plug-in Hyb	3840.471	65633490	27652873	37980617	5510480	11471278	968.1736
Statewide	2027	LDT2	Aggregate	Aggregate	Gasoline	6533170	8.98E+10	8.98E+10	0	1.06E+10	0	3512699
Statewide	2027	LDT2	Aggregate	Aggregate	Diesel	23723.73	3.35E+08	3.35E+08	0	39004813	0	9880.886
Statewide	2027	LDT2	Aggregate	Aggregate	Electricity	73247.28	8.86E+08	0	8.86E+08	1.28E+08	3.42E+08	0
Statewide	2027	LDT2	Aggregate	Aggregate	Plug-in Hyb	75958.15	1.23E+09	5.43E+08	6.9E+08	1.09E+08	2.08E+08	19046.72
Statewide	2027	MHDT	Aggregate	Aggregate	Gasoline	45832.05	8.09E+08	8.09E+08	0	3E+08	0	158081.5
Statewide	2027	MHDT	Aggregate	Aggregate	Diesel	292488.2	3.87E+09	3.87E+09	0	1.09E+09	0	436873.5
Statewide	2027	MHDT	Aggregate	Aggregate	Electricity	7633.639	1.3E+08	0	1.3E+08	30744842	1.4E+08	0

Appendix E

Noise Calculations

Noise Calculations for Hollister Air Attack Base Project

Mechanical		
Construction Equipment 1 (Dozer)	85	dBA at 50 feet
Construction Equipment 2 (Excavator)	85	dBA at 50 feet
Combined Daytime Noise at 50 feet (Ltotal at 50 feet)	88.0	dBA
Ltotal=10 log(10^L1/10+10^L2/10)		

Noise Threshold Limits and Distances from Project Sites to those Limits for Construction Equipment by Technique

Noise Threshold	**Threshold Level - Leq (dBA)**	**Distance to Leq Threshold from Middle of Project Site (feet)**
Sensitive Receptors	90	39.8
Source: FTA 2018		

Vibration Source Levels for Construction Equipment (FTA 2018)

Equipment	**PPV at 25 feet**	**VBA**
Vibratory Roller	0.21	94

Vibration Calculations with Equations for Vibration-Causing Equipment for Project Site (Roller)

Threshold	**Distance to Threshold from Middle of Project Site (feet)**	**Notes**
PPV=PPVref * (25/d)^1.5	25.8	Building damage threshold - 0.2 PPV
VdB=VdBref-30log(d/25)	135.3	Human Annoyance (80 VdB)

Vibration Calculations with Equations for Vibration-Causing Equipment for Project Site (Loaded Trucks)

Threshold	**Distance to Threshold from Middle of Project Site (feet)**	**Notes**
PPV=PPVref * (25/d)^1.5	#DIV/0!	Building damage threshold - 0.12 PPV (extremely susceptible buildings)
VdB=VdBref-30log(d/25)	0.1	Human Annoyance (80 VdB)