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PRELIMINARY MITIGATED NEGATIVE DECLARATION

Date:	March 19, 2025
Case No.:	**2024-005910ENV**
Project Title:	**12 kV Power Distribution Replacement**
Project Site:	Portions of San Francisco International Airport's West of Bayshore property and the Airport area east of U.S. Highway 101
Project Sponsor:	San Francisco International Airport, Audrey Park, 650.821.6678, audrey.park@flysfo.com
Staff Contact:	Don Lewis, 628.652.7543, don.lewis@sfgov.org

Project Description

San Francisco International Airport (SFO or Airport) proposes improvements to portions of the Airport's existing 12-kilovolt (kV) electrical power distribution systems (proposed project) to maintain reliable electrical power at Airport facilities. The proposed project would replace and upgrade segments of the 12 kV electric utility cable networks that distribute power to the Airport's terminals and landside buildings. Based on cable testing conducted by SFO in 2023 and 2024, the existing 12 kV cables are approximately 30 years old, are approaching the end of their serviceable lives, and are prone to failure. As such, SFO is proposing their replacement to maintain primary electrical power and redundancy and to minimize or avert a disruption of power, lighting, and telecommunications service to critical airport operations that may otherwise result from a failure of the electrical cable system.

The proposed project would involve removing and in-kind replacing electrical cables within an existing 12 kV underground concrete utility duct bank. An approximately 7,700-foot-long (1.5-mile-long) set of 12 kV cables would be removed and replaced between Substation BA, within the Airport's West of Bayshore (WOB) property, and manhole PD-B660, within a portion of the Airport area east of U.S. Highway 101. These electrical cables ultimately feed into electrical substations on Airport property for distribution to the Airport. Cable sets, each comprising a series of individual cables co-located in an existing Airport utility duct bank, would be removed from existing manholes and electrical stations and replaced.

Surface construction activities for the proposed project would include clearing vegetation, widening some existing vehicle access roads, and installing new gravel vehicle access roads on a portion of the WOB property. In addition, five permanent access pads surrounding the existing manholes on the WOB property would be installed, each totaling approximately 2,100 square feet (30 feet by 70 feet). Construction would also involve dewatering utility vaults accessible via manholes.

Finding

This project could not have a significant effect on the environment. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance), and 15070 (Decision to Prepare a Negative Declaration), and the following reasons as documented in the initial study for the project, which is attached.

Mitigation measures are included in this project to avoid potentially significant effects. See Attachment B.

cc: Project Distribution

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INITIAL STUDY
12 KV POWER DISTRIBUTION REPLACEMENT PROJECT
PLANNING DEPARTMENT CASE NO. 2024-005910ENV

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Abbreviations

Abbreviation	Definition
401 certification	Airport's water quality certification under the federal Clean Water Act, in Section 401
2019 RAP	2019–2029 San Francisco Garter Snake Recovery Action Plan
AC	alternating current
air basin	San Francisco Bay Area Air Basin
air board	California Air Resources Board
air district	Bay Area Air Quality Management District
Air Quality Methods Memo	*Air Quality Analysis Methods 12 kV Power Distribution Replacement Project Memorandum*
Air Quality Results Memo	*Air Quality Analysis Results Memorandum for the 12 kV Power Distribution Replacement Project*
Airport	San Francisco International Airport
airport commission	San Francisco Airport Commission
ALUC	Airport Land Use Commission
APM	Automated People Mover
ASCMs	Airport Standard Construction Measures
AWT	advanced water treatment system
BART	Bay Area Rapid Transit
basin plans	water quality control plans
Basin Plan	San Francisco Bay Basin (Region 2) Water Quality Control Plan
bay area	San Francisco Bay Area
Bay Trail	San Francisco Bay Trail
BMP	best management practice
BP	before present
BPPP	Bay Pollution Prevention Program
C/CAG	City/County Association of Governments of San Mateo County
Caltrans	California Department of Transportation
CAP	climate action plan
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
City	City and County of San Francisco
CNDDB	California Natural Diversity Database

Abbreviation	Definition
CO	carbon monoxide
Construction General Permit	*NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities*
CRLF	California red-legged frog
dB	decibels
dBA	A-weighted decibel(s)
DPM	diesel particulate matter
ERO	Environmental Review Officer
FEMA	Federal Emergency Management Agency
fire department	San Francisco Fire Department, Airport Bureau
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
general plan	San Francisco General Plan
GHG	greenhouse gas
HRA	health risk assessment
I-280	Interstate 280
ID	identification
IPaC	Information for Planning and Conservation
ITB	International Terminal Building
kV	kilovolt
lb/day	pounds per day
L_{eq}	equivalent continuous sound level representing the average sound level over a period of time
L_{max}	maximum noise level
M-1	Light Industrial
Master Plan	San Francisco International Airport Final Master Plan (adopted in 1992)
MCM	thousands of circular mils, a measurement of wire gauge
MEISR	maximum exposed individual sensitive receptor
MEIW	maximum exposed individual worker
mgd	million gallons per day
MLTP	Mel Leong Treatment Plant
MRZ-1	Mineral Resource Zone
NA	not applicable
NO_2	nitrogen dioxide

Abbreviation	Definition
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NWIC	Northwest Information Center
PBB	Passenger Boarding Bridges
PG&E	Pacific Gas and Electric Company
planning department	San Francisco Planning Department
PM	particulate matter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PM_{10}	particulate matter less than 10 microns in diameter
police department	San Francisco Police Department
PPV	peak particle velocity
proposed project	proposed improvements to portions of San Francisco International Airport's existing 12-kilovolt electrical power distribution systems
RADP	Recommended Airport Development Plan
RAP	Recovery Action Plan
ROG	reactive organic gases
Regional Board	Regional Water Quality Control Board
SamTrans	San Mateo County Transit
Secretary's Standards	*Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*
SF Transportation Guidelines	*Transportation Impact Analysis Guidelines for Environmental Review*
SFGS	San Francisco garter snake
SFO	San Francisco International Airport
ST	short term
SFO ALUCP	*Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*
SFPUC	San Francisco Public Utilities Commission
SO_2	sulfur dioxide
SWPPP	storm water pollution prevention plan
TACs	toxic air contaminants
TERPS	Terminal Instrument Procedures
TOG	total organic gases
µg/m³	micrograms per cubic meter

Abbreviation	Definition
U.S. 101	U.S. Highway 101
UTM	Universal Transverse Mercator
UTM – X	eastward-measured distance
UTM – Y	northward-measured distance
VdB	vibration decibels
VMT	vehicle miles traveled
Water Code	Porter-Cologne Water Quality Control Act
WOB	West of Bayshore property owned by San Francisco International Airport

SECTION A PROJECT DESCRIPTION

A.1 Project Location

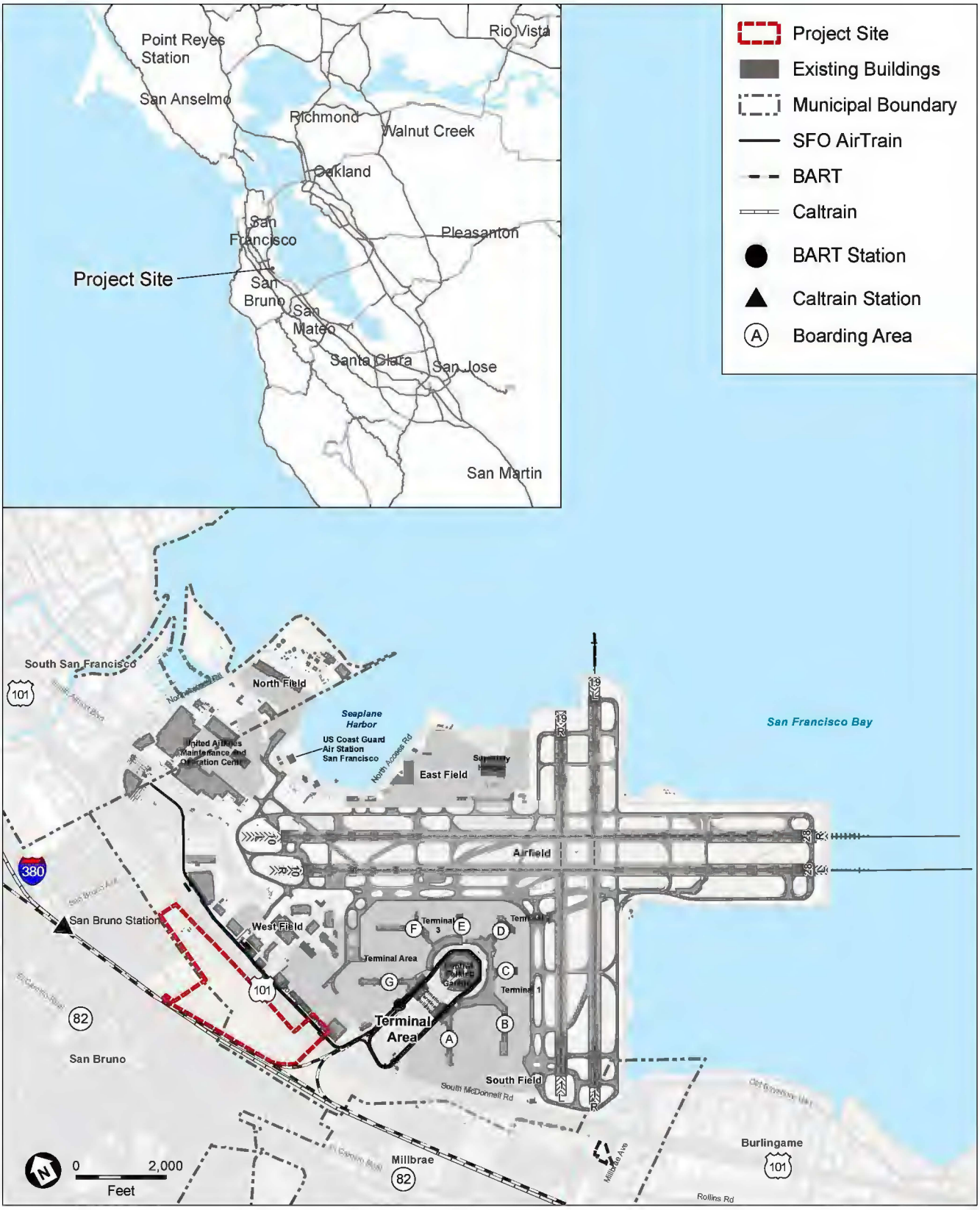
The project site consists of portions of both San Francisco International Airport's (SFO or Airport) West of Bayshore (WOB) property and a portion of the Airport area east of U.S. Highway 101 (U.S. 101), which are primarily located in unincorporated San Mateo County, approximately 13 miles south of downtown San Francisco (see **Figure 1**). Of the 5,100 acres that comprise Airport property, approximately 2,110 acres are located on land east of U.S. 101, 180 acres are west of U.S. 101, and 2,810 acres are within San Francisco Bay. U.S. 101 separates the WOB property from the operational portion of the Airport. The Airport's WOB property is bounded by residential and recreational developments to the west; San Bruno Avenue to the north; the Highline Canal to the south; and U.S. 101 to the east.

The portion of the project site on the WOB property is undeveloped but supports annual grassland, ornamental (primarily invasive eucalyptus), seasonal wetland, willow riparian, and freshwater marsh vegetation communities, as well as critical infrastructure that supports operations at the Airport, Caltrans, the cities of Burlingame, Millbrae, and San Bruno, telecommunications and utilities providers, and BART. The aboveground infrastructure consists of high-voltage electrical transmission lines operated and maintained by Pacific Gas and Electric Company (PG&E), transformers operated and maintained by the San Francisco Public Utilities Commission (SFPUC) that switch down the voltage level to medium-voltage distribution lines, as well as several SFO electrical substations.

SFO is responsible for operating, maintaining, and repairing the substation and PG&E is responsible for delivering power. Substation BA is located in the northern portion of the WOB property, just southeast of the Angus Avenue gate (see **Figure 2**, p. 3). This substation is connected to the electrical transmission and distribution infrastructure that supplies power to the Airport's terminals and support buildings on the east side of U.S. 101. Substation BA consists of paved surfaces with a single-story, 1,750-square-foot electrical utility building and an exterior manhole and other related electrical infrastructure and is enclosed by chain-link fencing and/or concrete walls for security purposes. The WOB property is a 180-acre undeveloped tract of land, immediately east of the cities of San Bruno and Millbrae, that provides habitat and wetland areas for federally and state listed species such as the California red-legged frog and the San Francisco garter snake.

Existing improved and unimproved private access roads also cross the project site within the WOB property. Underground infrastructure and utilities include water mains, high-pressure natural gas lines, storm drainage facilities, sanitary sewer lines, and telecommunications lines. Existing aboveground manhole covers are located throughout the project site within the WOB property, with underground manholes allowing access to below-grade infrastructure. Proposed project work would occur at Substation BA and manholes PD-B500, PD-B501, PD-B502, PD-B503, and PD-B504 (see Figure 2).

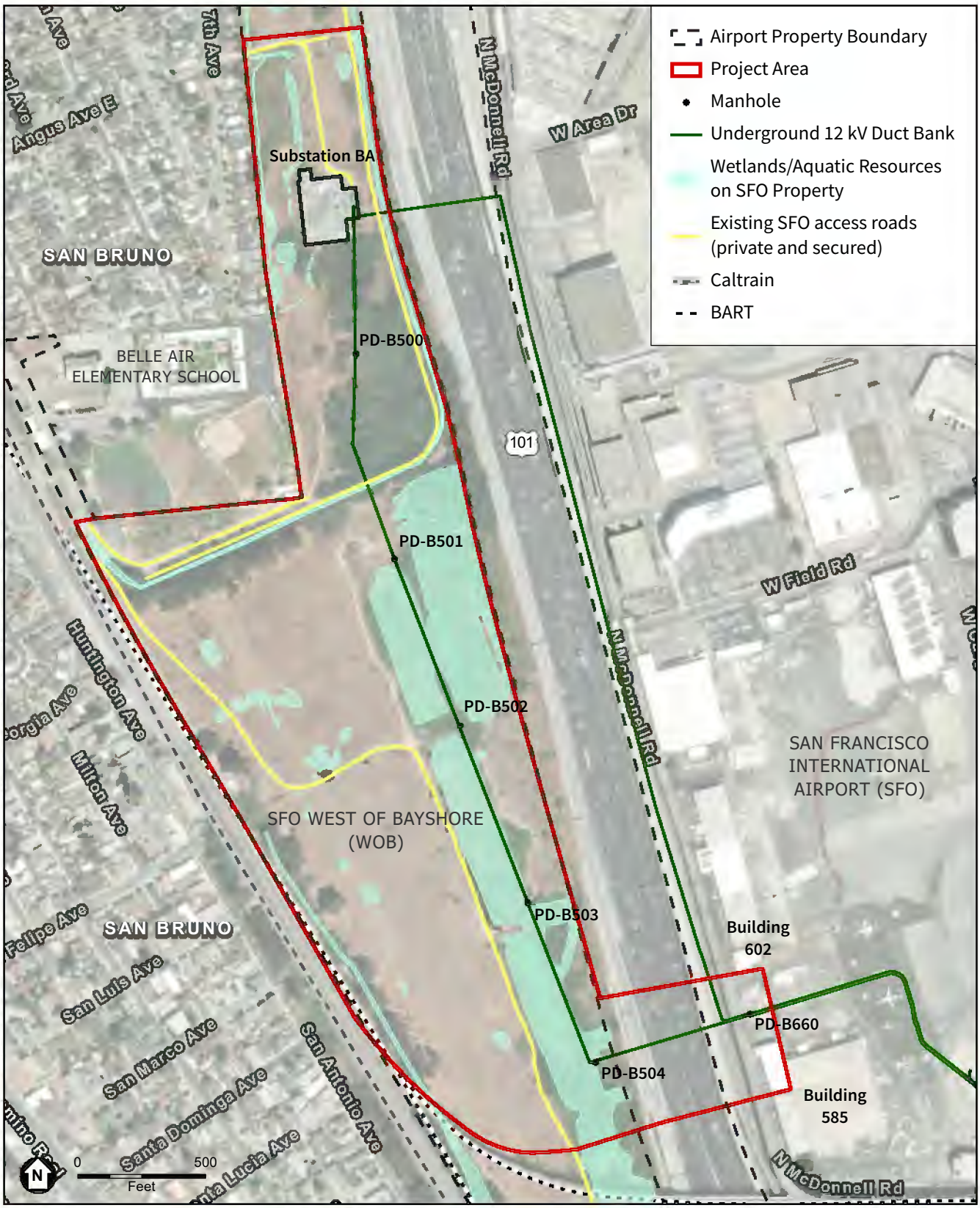
The portion of the project site within the Airport area east of U.S. 101 is located around manhole PD-B660 in the parking lot for Building 585, between Building 602 and Building 585, where the replacement cables would be pulled (see Figure 1).



SOURCE: SFO, 2021

12 kV Power Distribution Replacement Project

FIGURE 1
PROJECT LOCATION



SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

12kV Power Distribution Replacement Project

FIGURE 2
PROJECT SITE EXISTING CONDITIONS

A.2 Project Overview

SFO proposes improvements to portions of the Airport's existing 12-kilovolt (kV) electrical power distribution systems (proposed project) to maintain reliable electrical power at Airport facilities. The proposed project would replace and upgrade segments of the 12 kV electric utility cable networks that distribute power to the Airport's terminals and landside buildings. Based on cable testing conducted by SFO in 2023 and 2024 (discussed in more detail below), the existing 12 kV cables are approximately 30 years old, are approaching the end of their serviceable lives, and are prone to failure. As such, SFO is proposing their replacement to maintain primary electrical power and redundancy and to minimize or avert a disruption of power, lighting, and telecommunications service to critical airport operations that may otherwise result from a failure of the electrical cable system.

The proposed project would involve removing and in-kind replacing electrical cables within an existing 12 kV underground concrete utility duct bank. An approximately 7,700-foot-long (1.5-mile-long) set of 12 kV cables would be removed and replaced between Substation BA, within the WOB property, and manhole PD-B660, within a portion of the Airport area east of U.S. 101. These electrical cables ultimately feed into electrical substations on Airport property for distribution to the Airport. Cable sets, each comprising a series of individual cables co-located in an existing Airport utility duct bank, would be removed from existing manholes and electrical stations and replaced.

Surface construction activities for the proposed project would include clearing vegetation, widening some existing private vehicle access roads, and installing new gravel vehicle access roads on a portion of the WOB property. In addition, five permanent access pads surrounding the existing manholes on the WOB property would be installed, each totaling approximately 2,100 square feet (30 feet by 70 feet). The proposed access roads and pads would allow SFO electricians continued access for visual inspections and maintenance, as needed. Construction would also involve dewatering utility vaults accessible via manholes.

A.3 Background

The Airport has two main substations, Substation M and Substation BA, both of which are supplied by PG&E transmission lines through SFPUC transformers. These two substations distribute power to the entirety of the Airport. Substations M and BA feed Stations TR and TS, which primarily supply power to the international and domestic terminals via multiple sets of 12 kV electrical cables that run through a series of underground duct banks, manholes, utility tunnels at the Airport. These 12 kV cables—*BATR and BATS cables*[1]—have reached their useful end of life and are being replaced under a separate project.[2]

Several unplanned power outages have occurred at the Airport over the past few years, most recently in June and November 2023 and June 2024, because of aging and failing cables and wildlife chewing through cables. These outages have disrupted Airport operations and resulted in costly repairs and have demonstrated that the failing BATR and BATS cables are in urgent need of replacement. Cable testing conducted by SFO in 2023 and 2024 has shown that the cables have low insulation quality, indicating that they may fail again if the

[1] BATR and BATS are SFO cable identifiers that identify the cable path. The BATR cables run from Substation BA to Station TR and the BATS cables run from Substation BA to Station TS.
[2] SFO Stations BA and TR/TS 12 kV Power Distribution Replacement, Case No. 2022-011469ENV, issued November 29, 2022, and SFO 12-Kilovolt Cable Replacement Project, Case No. 2023-009135ENV, issued November 1, 2023.

entirety of the 12 kV cables are not replaced within the next few years. These cables are critical to maintaining normal operations at SFO.

A.4 Project Characteristics

The proposed project would involve removing and replacing electrical cables within an existing underground utility duct bank. An approximately 7,700-foot-long (1.5-mile-long) set of 12 kV medium-voltage cables would be removed and replaced between Substation BA, within the WOB property, and manhole PD-B660, within a portion of the Airport area east of U.S. 101. Cable sets, each comprising a series of individual cables co-located in existing Airport utility duct bank, would be removed from existing manholes and electrical substations and replaced. The cables would cross from the WOB side to PD-B660 located within the Airport area east of U.S. 101 through an existing underground utility tunnel located under U.S. 101. The cables proposed for replacement generally underlie paved surfaces or are within existing utility tunnels and duct banks.

The proposed project would include four basic components:

(1) Improvement and widening of approximately 0.3 mile of existing access roads and construction of approximately 0.6 mile of new access roads for construction vehicles to access manholes on the WOB property; and to facilitate continued assessment and as-needed maintenance of the cables by SFO electric shop/contractors in the future.

(2) Construction of new 30-foot-wide by 70-foot-long permanent access pads around five manholes and raising of manhole lids.

(3) Temporary dewatering of electrical vaults/manhole structures before cable replacement.

(4) Removal of existing cables and subsequent installation of new armored cables within existing underground duct banks.

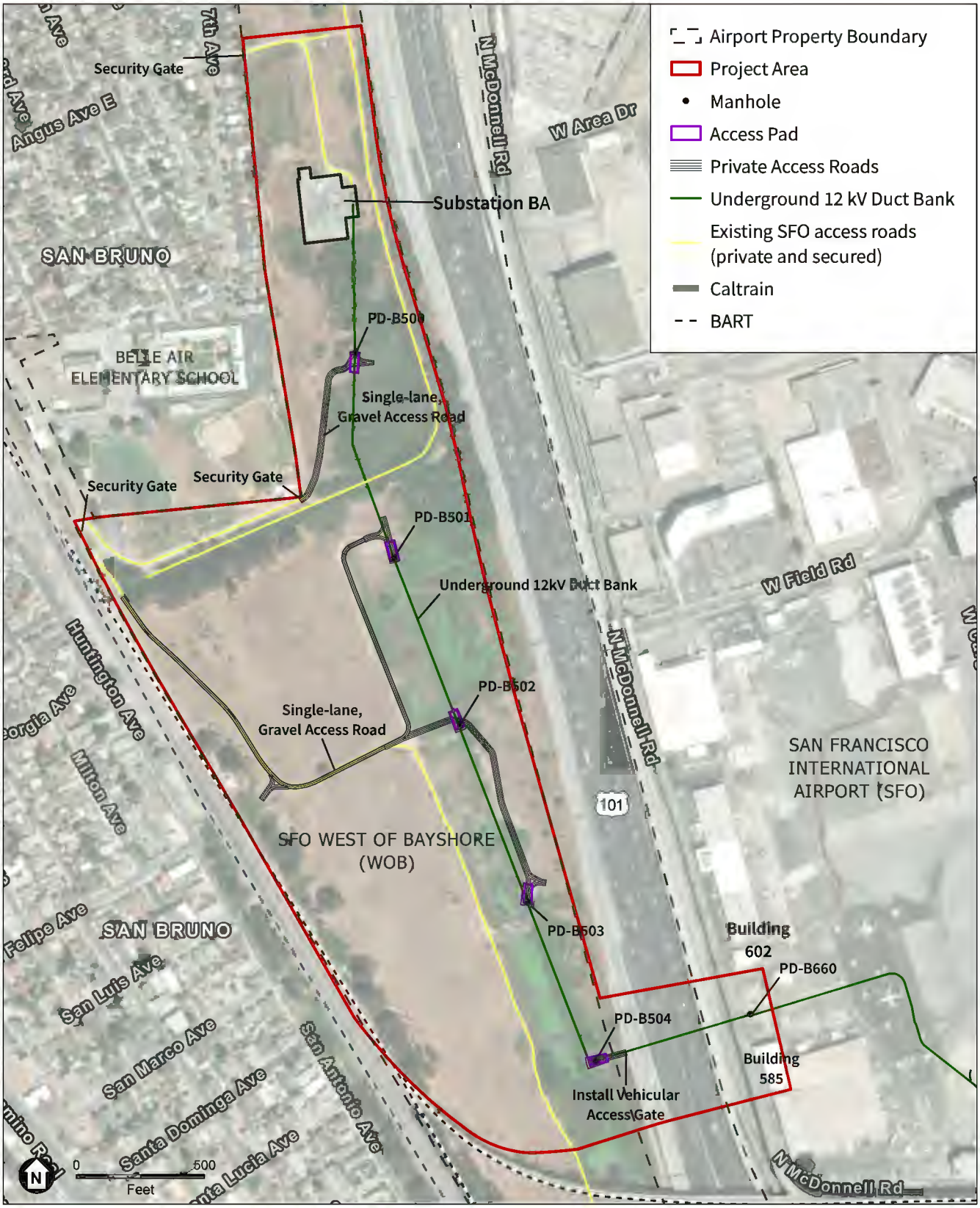
Figure 3 shows the overall layout of the proposed project.

Table 1, p. 7, summarizes the design characteristics of the 12 kV electric power distribution line components.

Access Roads

Approximately 0.3 mile of existing 5-foot-wide gravel access roads on the WOB portion of the project site would be improved and widened to 12 feet to accommodate construction vehicles. Approximately 0.6 mile of new single-lane, 12-foot-wide gravel access roads would also be constructed for construction vehicles to access each manhole on the WOB portion of the project site (see Figure 3).

Gravel shoulders would be installed along the improved and new access roads at a slope of 2:1 from existing grade to facilitate stormwater drainage. Because the access roads would be single-lane roads, four gravel turnouts would be provided for vehicles to maneuver in and out of the site. Turnouts would be located adjacent to manholes PD-B500, PD-B501, and PD-B503 and along the existing access road that would be improved and widened. The depth of the gravel roads currently varies from 12 inches to 33 inches over



SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

12kV Power Distribution Replacement Project

FIGURE 3
PROPOSED PROJECT LAYOUT

Table 1 Design Characteristics of the Proposed 12 kV Electric Power Distribution Line Components

Project Feature	Design Characteristic
Length of electric power distribution line	Approximately 1.5 miles (7,700 feet)
Location	Existing underground utility duct banks, accessible from substation vaults and manholes
Manholes	Six existing manholes WOB manholes: PD-B500, PD-B501, PD-B502, PD-B503, and PD-B504 Airport area east of U.S. 101 manhole: PD-B660
Average duct length between manholes	700 feet
Voltage	12,470 volts (12 kV) AC
Circuit configuration	Double-circuit with three phases
Cable size and configuration	PD-B504 to PD-B660 duct: 750 MCM, four cables per phase All other ducts: 1,000 MCM, two cables per phase
Total cable length	Approximately 63,600 linear feet [a]
Total area of permanent ground disturbance	Manhole access pads: 10,500 square feet Access roads: 56,400 square feet

SOURCE: Data provided by SFO Civil Engineering and compiled by Environmental Science Associates in 2024.

ABBREVIATIONS: AC = alternating current; Airport = San Francisco International Airport; kV = kilovolts; MCM = thousands of circular mils, a measurement of wire gauge; WOB = West of Bayshore

a. The total cable length is longer than the length of the distribution line because there are multiple cables for each circuit located within the electrical vaults. Each circuit (BATR and BATS) consists of six (6) cables from Substation BA to manhole PD-B504, and transitions to twelve (12) cables crossing U.S. 101 to manhole PD-B660.

existing subgrade and stabilization fabric.[3] No subgrade grading activities would occur. The gravel would be placed directly on top of existing subgrade and graded in courses accordingly. The new access roads are designed to accommodate a heavy duty truck with a 20-foot trailer.

The new access road alignment is also designed to avoid wetlands, and no asphalt surfaces are proposed because of the potential for attracting wildlife to hot pavement surfaces and risking harm from vehicles.

To access manhole PD-B504, a new vehicular access gate would be installed within an existing chain-link fence owned by the California Department of Transportation (Caltrans) along an existing service road adjacent to U.S. 101 (Figure 3). The existing pedestrian access gate would be removed. SFO would coordinate with Caltrans to obtain a vehicle encroachment permit for gate installation. The new and improved access roads would be maintained at the proposed 12-foot width after construction to facilitate future maintenance-related and emergency access. No access road improvements are proposed on the Airport side of the project site.

[3] Stabilization fabric is used as a layer of protection for the soil during construction that allows water to drain while holding the soil in place. Stabilization fabric's primary uses include separating soil from rock, stabilizing soil, draining a location of flooding water, filtering water, and protecting areas against erosion.

Table 2 summarizes the design characteristics of the access roads, and **Figure 4** presents typical access road cross sections.

Table 2 Design Characteristics of the Access Roads

Project Feature	Feature Measurements (length & area)	Proposed Feature Changes
Existing roads to be improved/widened	0.3 mile (1,500 linear feet) 18,000 square feet	Modification required; existing gravel surface roads must be improved and widened to 12 feet to allow access by construction equipment. Upon completion of construction, the width of the improved/widened route would be maintained.
New roads and turnouts	0.6 mile (3,200 linear feet) 38,400 square feet	Requires construction of new single-lane, 12-foot-wide, gravel-surface access roads. Single-lane access roads require four gravel-surface turnouts adjacent to PD-500, PD-501, and PD-503, and along the existing access road that would be widened. Upon completion of construction, the new route width and turnouts would be maintained.

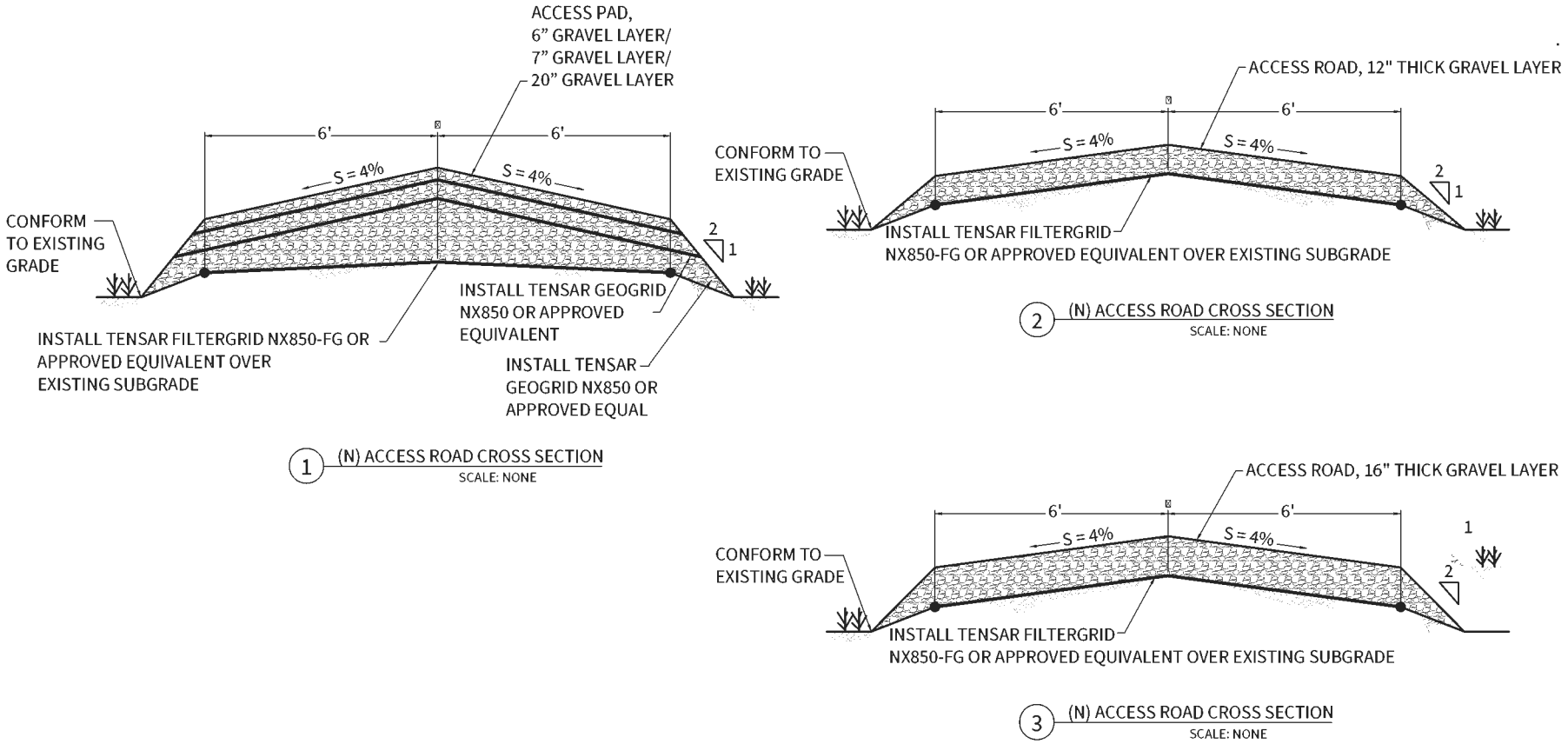
SOURCE: Data provided by SFO Civil Engineering and compiled by Environmental Science Associates in 2024.

Access Pads

After widening of access roads has been completed, permanent gravel access pads would be placed around five manhole sites: PD-B500, PD-B501, PD-B502, PD-B503, and PD-B504 (**Figure 5** through **Figure 9**, pp. 10 through 14). An approximately 30-foot-wide by 70-foot-long (2,100-square-foot) leveled gravel pad would be placed around each existing manhole, allowing adequate space for construction vehicles to maneuver and for the placement of cable pulling equipment. Gravel for the access pads would be placed over a new filter grid and stabilization fabric. The edges of the access pads would be sloped 2:1 to conform to the existing grade. The manhole lids would be raised up to 33 inches to match the finished grade of each new access pad and provide continuous access to the manholes after construction. Manhole risers would be installed to bridge the gap between the existing manhole grade and the proposed raised finished grade.[4]

The design and placement of access pads is intended to avoid impacts on wetlands adjacent to manholes PD-B503 and PD-B504 to the extent feasible. However, it is anticipated that approximately 0.055 acre (2,396 square feet) of fill in wetland areas would be required to accommodate the access pads in these two locations. The permanent access pads would allow access to manholes for future necessary infrastructure maintenance or emergency access. **Table 3**, p. 15, summarizes the design characteristics of the access pads and **Figure 10**, p. 16, shows a typical access pad cross section.

[4] Riser sections are used to obtain the required height of the manhole structure. Several riser sections may be stacked vertically to increase the height of the manhole structure to the desired height.



SOURCE: SFO, 2023

12 kV Power Distribution Replacement Project

FIGURE 4

TYPICAL PROPOSED ACCESS ROAD CROSS SECTIONS

SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

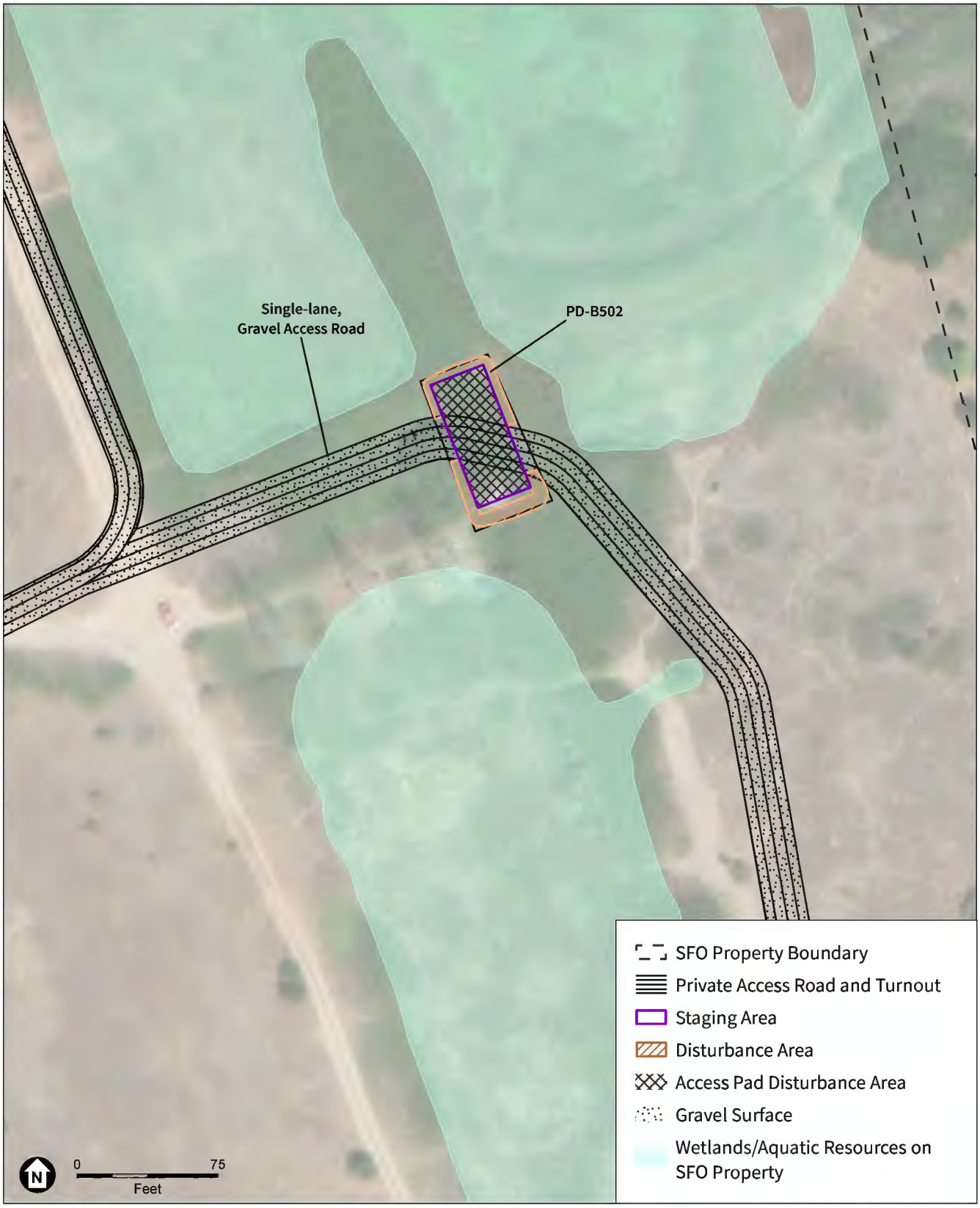
12kV Power Distribution Replacement Project

FIGURE 5
PROPOSED MANHOLE PD-B500 DETAIL

SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

12kV Power Distribution Replacement Project

FIGURE 6
PROPOSED MANHOLE PD-B501 DETAIL



SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

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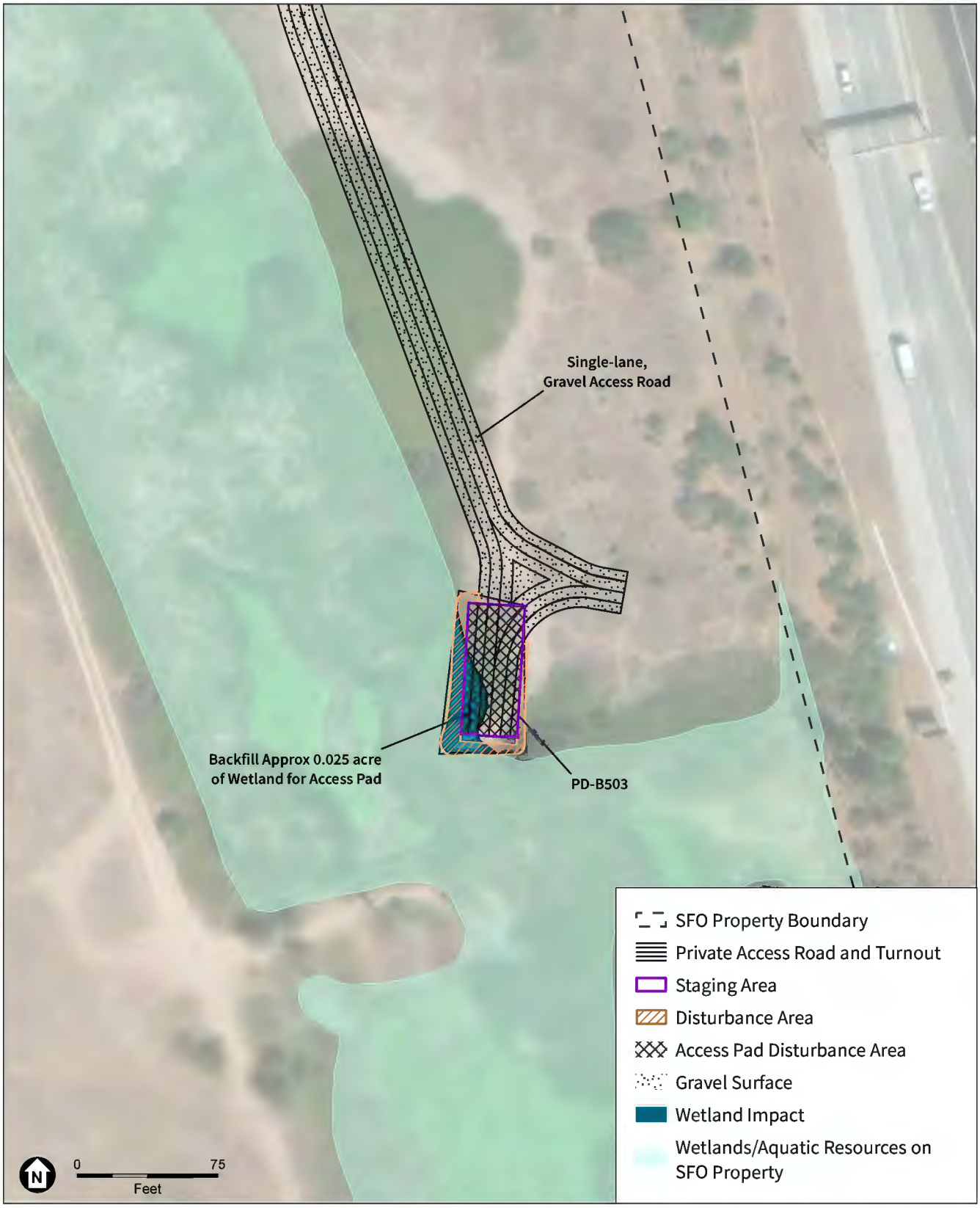
FIGURE 7
PROPOSED MANHOLE PD-B502 DETAIL



SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

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FIGURE 8
PROPOSED MANHOLE PD-B503 DETAIL

SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

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FIGURE 9
PROPOSED MANHOLE PD-B504 DETAIL

Table 3 Design Characteristics of the Proposed Access Pads

Project Feature	Feature Measurements	Proposed Feature Details
PD-B500 Access Pad	30 feet by 70 feet (2,100 square feet)	New gravel access pad Manhole lid raised up to 33 inches
PD-B501 Access Pad	30 feet by 70 feet (2,100 square feet)	New gravel access pad Manhole lid raised up to 33 inches
PD-B502 Access Pad	30 feet by 70 feet (2,100 square feet)	New gravel access pad Manhole lid raised up to 33 inches
PD-B503 Access Pad	30 feet by 70 feet (2,100 square feet)	New gravel access pad Manhole lid raised up to 33 inches Approximately 0.025 acre of wetland fill anticipated
PD-B504 Access Pad	30 feet by 70 feet (2,100 square feet)	New gravel access pad Manhole lid raised up to 33 inches Approximately 0.030 acre of wetland fill anticipated
TOTAL ACCESS PAD AREA	**10,500 square feet**	**Approximately 0.055 acre of wetland fill anticipated**

SOURCE: Data provided by SFO Civil Engineering and compiled by Environmental Science Associates in 2024.

Dewatering

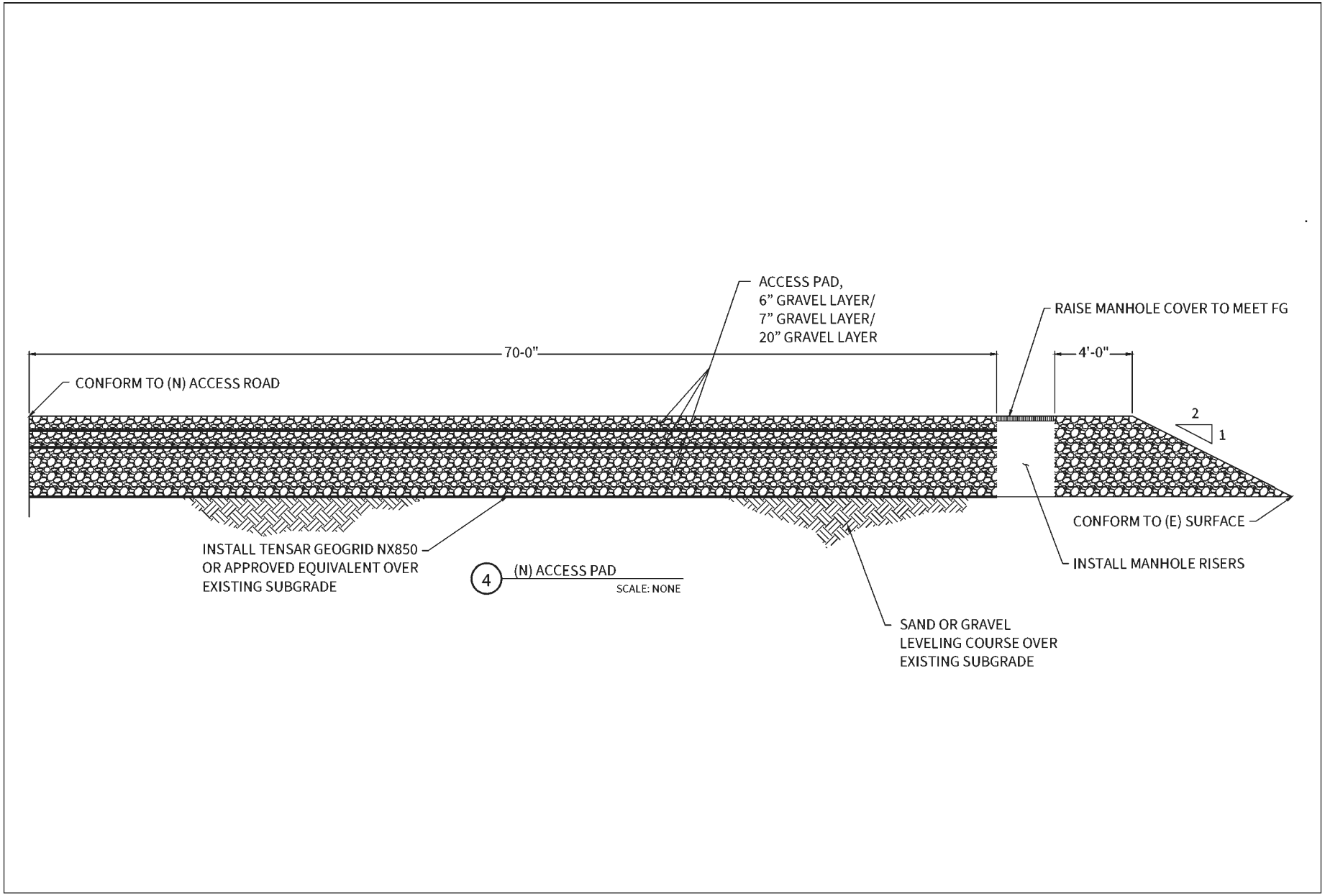
After construction of the access roads and access pads and before the cable replacement work, the electrical vaults would be dewatered. Before dewatering, encountered groundwater would be tested. The water would be pumped into 2,000-gallon water trucks, tested, and disposed of offsite. Any water encountered at Substation BA would be dewatered and placed in water tanks staged along the existing access road to the substation. Dewatering would allow electricians to access the utility vault and duct bank to reconnect replacement 12 kV cables and would occur before the cable replacement along each segment. Proposed offsite disposal locations from the WOB portion of the project site would occur within SFO property with stormwater drainage to the SFO Mel Leong Treatment Plant for local treatment, or at the nearest storm drain owned by a neighboring city in coordination with that city.

Before discharging dewatered groundwater, the construction contractor would test the groundwater to ensure that the groundwater being disposed of is of quality equal to the pretreatment standards of San Mateo County, as regulated by the Water Quality Control Board. Under SFO's National Pollutant Discharge Elimination System (NPDES) permit, dewatered groundwater on the Airport side at PD-B660 would be fed to and treated at the SFO Mel Leong Treatment Plant.

Cable Replacement

An approximately 1.5-mile-long set of medium-voltage, existing 12 kV cables would be replaced with armored cables[5] between Substation BA within the WOB property and manhole PD-B660 located within the

[5] Armored cables have a metal outer protective layer that improves the service life of the cable due in part to higher resistance to corrosion and animal bites.



SOURCE: SFO, 2023

12 kV Power Distribution Replacement Project

FIGURE 10

TYPICAL PROPOSED ACCESS PAD CROSS SECTION

Airport area east of U.S. 101 to extend the life of the cables. The cable crossing from manhole PD-B504 to PD-B660 would occur through an existing underground utility tunnel under U.S. 101. Removal of existing cables and subsequent installation of new armored cables would be conducted within existing underground duct banks, manholes, and electrical stations. Cables for two separate circuits, the BATR and BATS cables, would be replaced. Because the cable networks distribute power to the Airport's terminals and support buildings, only one circuit can be deenergized at a time to accommodate the proposed cable replacement. One circuit would consist of six 1,000 MCM[6] cables from Substation BA to manhole PD-B504, the last manhole within the WOB property, transitioning to twelve (12) 750-MCM cables crossing U.S. 101 to PD-B660, the next manhole located within the Airport area east of U.S. 101. A total cable length of approximately 63,600 linear feet would be replaced between Substation BA and PD-B660.

The existing cables would be removed, and new armored cables would be pulled within the same duct bank, between two access points at a time (e.g., PD-B500 to PD-B501). For each segment, the new armored cables would be tested, and necessary splices and terminations would be performed. Supports elevating the electrical cables within the utility tunnels would be replaced, as necessary, upon inspection. After cable replacement at all segments has been completed, the new armored cables would be tested from end-to-end terminations. The process would then be repeated for the second circuit. **Table 4** summarizes the design characteristics of the replacement 12 kV cables.

Table 4 Design Characteristics of the Replacement 12 kV Cables

Cable ID	From	To	Cable Size (MCM)	Number of Cables per Phase	Total Number of Cables	Approx. Cable Length for One Cable (feet)	Approx. Total Cable Length (feet)
12BATR-1 (First Circuit)	Substation BA	PD-B500	1,000	2	6	750	4,500
	PD-B500	PD-B501	1,000	2	6	900	5,400
	PD-B501	PD-B502	1,000	2	6	750	4,500
	PD-B502	PD-B503	1,000	2	6	800	4,800
	PD-B503	PD-B504	1,000	2	6	700	4,200
	PD-B504	PD-B660	750	4	12	700	8,400
12BATS-1 (Second Circuit)	Substation BA	PD-B500	1,000	2	6	750	4,500
	PD-B500	PD-B501	1,000	2	6	900	5,400
	PD-B501	PD-B502	1,000	2	6	750	4,500
	PD-B502	PD-B503	1,000	2	6	800	4,800
	PD-B503	PD-B504	1,000	2	6	700	4,200
	PD-B504	PD-B660	750	4	12	700	8,400
TOTAL							**63,600**

SOURCE: Data provided by SFO Electrical Engineering and compiled by Environmental Science Associates in 2024.

ABBREVIATIONS: ID = identification; kV = kilovolt; MCM = thousands of circular mils, a measurement of wire gauge

[6] *MCM* is an abbreviation for thousands of circular mils, a measurement of wire gauge. 1 MCM = 1 kcmil = 0.5067 square millimeters. A mil is 1/1000 inch. A wire that is 1 mil in diameter has an area of one circular mil or 1 MCM. A 1,000 MCM wire is approximately 507 square millimeters. A 750-MCM wire is approximately 380 square millimeters.

A.5 Construction

The following sections present information on the construction schedule and planned construction activities, including proposed construction methods, access and staging areas, construction equipment, and construction hours.

Construction Schedule, Phasing, and Methods

Project construction is expected to occur over approximately 36 months, with work estimated to begin in 2026 and conclude by 2028, and work periods extending from March to October each year.[7] Proposed project construction would consist of five main phases: site preparation and vegetation removal, access road installation, access pad installation, cable removal and installation for the first circuit, and cable removal and installation for the second circuit. **Table 5** lists the estimated duration of each construction phase. The following sections detail proposed construction methods for each phase.

Table 5 Construction Phasing of the 12 kV Project

Phase	Duration
Site Preparation and Vegetation Removal	4–6 weeks
Access Road Installation	9–16 weeks
Access Pad Installation	4–6 weeks
First Circuit Cable Removal and Installation	20–24 weeks
Second Circuit Cable Removal and Installation	20–24 weeks
TOTAL PROJECT	**2026–2028**

SOURCE: Data provided by SFO Civil and Electrical Engineering and compiled by Environmental Science Associates in 2024.
ABBREVIATION: kV = kilovolt

Site Preparation and Vegetation Removal

The proposed access road and access pad layout would be surveyed, and vegetation would be cleared for the proposed 12-foot-wide access roads and variable shoulder widths, as well as for the 30-foot-wide by 70-foot-long access pads. Because of the environmentally sensitive nature of the WOB property, no vegetation would be removed through mechanical means. All vegetation would be cleared by hand or non-mechanical means (e.g., goat grazing). As a conservative estimate, approximately 1.5 acres of vegetation would be cleared. Approximately 27 trees would be removed. A leveling course, consisting of sand or gravel, would be placed as needed on existing subgrade to correct any localized depressions. No subgrade grading activities would occur. To prevent potential harm to burrowed species, no excavation of topsoil is proposed. Vegetation removal and site preparation activities are anticipated to take place over four to six weeks, with agency approved biological monitor(s) present.

[7] Hand-clearing of vegetation from select work areas may occur during the winter months to avoid the nesting bird season.

Access Road Installation

Filter fabric and soil stabilization fabric would be placed on the existing subgrade along the 12-foot-wide access road alignment. Access road installation methods and materials would be consistent with agency-approved road maintenance methods currently used at the WOB property. Gravel for the access roads would be installed on top of the filter fabric and soil stabilization fabric. No excavation or subsurface grading is proposed. Gravel courses would be installed and graded in lifts as necessary, with soil stabilization fabric placed between lifts of gravel as shown in Figure 4, p. 9. A typical gravel course in lifts would contain a 6-inch-deep gravel layer overlying soil stabilization fabric, on top of a 7-inch-deep gravel layer overlying soil stabilization fabric, on top of a 20-inch-deep gravel layer overlying filter fabric and soil stabilization fabric on top of the subgrade. Gravel access road shoulders of variable widths would be installed at a slope of 2:1 from existing grade. Access road installation activities are anticipated to take place over nine to 16 weeks.

Manhole Access Pad Installation

Filter fabric would be placed over the subgrade surface of the proposed five 30-foot-wide by 70-foot-wide access pads. Similar to access road installation, no excavation or subsurface grading is proposed. Gravel courses would be installed and graded in lifts, with soil stabilization fabric placed between lifts of gravel as shown in Figure 10, p. 16.[8] A typical gravel course in lifts for access pads would contain a 6-inch-deep gravel layer overlying soil stabilization fabric, on top of a 7-inch-deep gravel layer overlying soil stabilization fabric, on top of a 20-inch-deep gravel layer overlying filter fabric and soil stabilization fabric on top of the subgrade. Gravel access pads would be shaped at a slope of 2:1 from existing grade. Manhole lids would be raised up to 33 inches to match the finished grade of the access pad, and manhole risers would be installed. New labels would be welded onto existing manhole covers, and new labels would be stenciled onto manhole neck walls for identification purposes. Approximately 6,700 cubic yards of aggregate material would be brought on to the site to create access roads, access pads, and raise manhole elevations. Access pad installation activities are anticipated to take place over four to six weeks.

Cable Removal and Installation in the First Circuit

Cable replacement activities for the first circuit would involve the removal of existing and installation of new armored 12BATR-1 cables from Substation BA to manhole PD-B660. The cable replacement would occur in six segments between two end access points. Each segment replacement is anticipated to take approximately four weeks. The proposed phasing of segments is as follows:

1. Substation BA to PD-B500
2. PD-B500 to PD-B501
3. PD-B501 to PD-B502
4. PD-B502 to PD-B503
5. PD-B503 to PD-B504
6. PD-B504 to PD-B660

Before cable replacement for each segment, circuit shutdowns would be coordinated with the City and County of San Francisco and SFO a minimum of two weeks before shutdown, and the affected systems and

[8] During compaction operations, a lift is a layer of soil that is dumped by the construction equipment and then subsequently compacted as structural fill.

scope of work to occur during shutdown would be clearly indicated. Work areas would be set up around manholes and manholes would be dewatered. As described above under *Dewatering*, p. 15, dewatering would include initial testing of groundwater encountered, pumping of groundwater into 2,000-gallon water trucks, testing, and discharge or off-hauling of water to SFO-approved locations.

The cable pulling operation for each segment would consist of a puller setup positioned at one end point and a tensioner setup with a cable reel truck positioned at the other end point. The new armored cables in each segment would be tested before splicing and removal of the existing cables. After cable replacement at all segments has been completed, the new armored cables would be tested from end-to-end terminations. Cable replacement activities for the first circuit are anticipated to take place over 20 to 24 weeks.

Cable Removal and Installation in the Second Circuit

Cable replacement activities for the second circuit would involve the removal of existing and installation of new armored 12BATS-1 cables from Substation BA to manhole PD-B660. For the second circuit removal and installation, the previously described process for the first circuit would be repeated. Cable replacement activities for the second circuit are anticipated to take place over 20 to 24 weeks.

Construction Equipment

The proposed project would require the following list of equipment for construction activities:

- Grader (Komatsu or equivalent)
- Dump truck (10-cubic-yard capacity)
- 2,000-gallon water truck
- Compactor (Komatsu or equivalent)
- SuperDump (21-ton maximum capacity)
- Offroad forklift (JLG or equivalent)
- Tractor grader
- Heavy duty truck with 20-foot trailer (with cable reel—2 tons)

Construction vehicles would be limited to a maximum speed of 5 miles per hour and would be escorted by a biological monitor. Refer to Section E.15, Biological Resources, for full consideration of construction equipment, methods, and associated biological monitoring measures.

Construction Access and Staging Areas

Access to the WOB property is restricted to SFO, public utility, entities with access agreements with SFO, and law enforcement staff as an “Environmentally Sensitive Area” and for the security of critical infrastructure on site. All construction access to the WOB property would be coordinated with SFO staff. Substation BA would be accessed through Gate L, located at 7th and Angus avenues in the City of San Bruno. Manhole PD-B500 would be accessed through Gate J, located at the end of 1st Avenue in San Bruno. Manholes PD-B501, PD-B502, and PD-B503 would be accessed through Gate H, located off 1st Avenue in San Bruno. Manhole PD-B504 would be accessed through a new vehicular access gate within an existing chain-link fence owned by Caltrans along an existing service road adjacent to U.S. 101, as described under *Access Roads*, p. 5. Manhole PD-B660 located within the Airport area east of U.S. 101 would be accessed through the West Field Checkpoint, and employees and vehicles would be required to be badged for access. Because of the proximity to Airport operations, a construction safety plan would be prepared for the work at PD-B660.

Because of site sensitivity at the WOB property, no construction staging would occur onsite except on the proposed access pads. Offsite construction staging areas would be provided by the construction contractor, or, if available at the time of construction, construction staging activities could occur on areas of Airport property near the project site, including the Aviador Lot. The Aviador Lot is located on Airport property west of U.S. 101 in the City of Millbrae. For dewatering of the cable vault at Substation BA, water tanks would be staged on the existing access road to the substation.

Construction Hours and Workforce

Construction activities would typically occur Monday through Friday, 7 a.m. to 5 p.m. No nighttime construction or weekend activities are anticipated. Multiple construction crews would work in different locations during project construction activities, including site preparation and vegetation removal, access road installation, and access pad installation. Cable replacement would occur segment by segment as described under *Construction Schedule, Phasing, and Methods*, p. 18. It is anticipated that a maximum of 26 total workers would be onsite at one time (including a possible inspector and biological resources monitors), with the maximum occurring during the access road installation and access pad installation phases. **Table 6** lists the estimated maximum number of workers for each construction phase.

Table 6 Workers by Construction Phase for the 12 kV Project

Construction Phase	Maximum Number of Workers
Site Preparation and Vegetation Removal	8 workers
Access Road Installation	26 workers
Access Pad Installation	26 workers
First Circuit Cable Removal and Installation	18 workers
Second Circuit Cable Removal and Installation	18 workers

SOURCE: Data provided by SFO Civil and Electrical Engineering and compiled by Environmental Science Associates in 2024.

A.6 Operation and Maintenance

SFO would be responsible for the continued operation and maintenance of the new electrical infrastructure, same as under existing conditions. Routine inspections would include visual and electrical testing of cables and splices every two years. Testing would require dewatering manholes before access, as described for construction-phase dewatering. Light-duty vehicles would also be used to carry testing equipment. Emergency access and repairs would occur as needed, although fewer repairs would be anticipated than under existing conditions as a result of full cable replacement. The proposed access road widening and access road construction would facilitate future maintenance-related and emergency access to the site and improve conditions for vehicles accessing the site but would not result in an increase in operational activity relative to existing conditions. The proposed project would not generate any new employees; operation and maintenance would be performed by existing SFO staff. The total energy delivered to serve the load at the Airport would not change as a result of the proposed project.

A.7 Project Approvals

The proposed project is subject to review and approvals by federal, state, regional, and local agencies and is subject to change. These approvals may be considered by decision-makers in conjunction with the required environmental review, but they may not be granted until completion of the environmental review.

Federal[9]

- Clean Water Act Section 404 Dredge and Fill Permit, likely a Nationwide Permit from the U.S. Army Corps of Engineers.
- National Historic Preservation Act Section 106 Consultation with the State Historic Preservation Office.
- Federal Endangered Species Act Section 7 Consultation with the U.S. Fish and Wildlife Service.
- Environmental review under the National Environmental Policy Act.

State

- California Fish and Game Code 1670 Restoration Management Permit or California Fish and Game Code 1602 Lake and Streambed Alteration Notification by the California Department of Fish and Wildlife.[10]
- Clean Water Act Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (Regional Board).
- Approval of an Encroachment Permit by the California Department of Transportation.

Local

- Approval to issue request for construction bid and award of associated contracts by the San Francisco Airport Commission.
- Design review and approval of a construction permit by San Francisco International Airport Building Inspection and Code Enforcement.

[9] This is a preliminary list for informational purposes. Federal permits and permitting decisions would be determined by the federal agencies with permitting authority.
[10] A CDFW Lake and Streambed Alternation Agreement would only be pursued if SFO's existing CDFW Restoration Management Permit could not be modified to include the proposed project.

SECTION B PROJECT SETTING

B.1 Cumulative Projects

Past, present and reasonably foreseeable development projects with the potential to contribute cumulative effects on and within a 0.25-mile radius of the project site are identified below in **Table 7** and **Figure 11**, p. 26. These projects are currently under review by the planning department or are entitled but not yet under construction. The potential cumulative effects of these projects are addressed, as appropriate, under each environmental topic herein.

Table 7 Cumulative Projects on and within 0.25 Mile of the Project Site

Map Number	Location	Description	Status
1	WOB property (including project site)	**2019–2029 San Francisco Garter Snake Recovery Action Plan (Case No. 2008.0498ENA)** – The 2008 Recovery Action Plan (RAP) for the San Francisco Garter Snake provides a comprehensive management framework for the conservation of sensitive biological resources on the Airport-owned WOB property. The 2008 RAP proposed the following types of activities: upland habitat enhancement and vegetation management; fuel abatement and firebreaks; access road maintenance and restoration; wetland deepening; access control; aquatic habitat enhancement; and maintenance and trash management. An addendum to the 2008 RAP that was approved in 2020 authorized the following additional activities on the WOB property: selected non-native tree removal; an alternative canal vegetation maintenance pilot program; minor maintenance of existing infrastructure; feral cat management; and research projects to advance understanding of species.	Implementation 2020–2029
2	WOB property (Station BA)	**Substation Transformer Bank Upgrade Project (Case No. 2023-004665ENV)** – This project would replace two existing electrical transformers and install a spare transformer at a substation located in the WOB property at SFO. The project would replace the two end-of-life transformers, bring up to code the connectivity, and provide redundancy/back up with a third new transformer to ensure continual supply of electricity to the Airport by keeping two transformers running, thereby reducing the risk of power loss.	Anticipate construction to begin in 2027

Map Number	Location	Description	Status
3	WOB property (Station BA) and Airport area	**12-Kilovolt Cable Replacement Project (Case No. 2023-009135ENV)**[11] – This project would install new and replace existing 12 kV electrical cables and associated infrastructure at various locations on Airport property consisting of the following components within 0.25 mile of the project site: • West Field Power Improvements – This project consists of replacing the existing 12 kV cables that run from Station BP to various buildings and facilities in the West Field Area. • Station M Medium-Voltage Cable Replacement – This project consists of replacing the existing 12 kV cables that run from Station M to Station BP. • AirTrain Medium-Voltage Cable Replacement Phases 1 and 2 – This project consists of replacing the existing 12 kV cables that run from Station BA (Phase I) and Station M (Phase 2) to the AirTrain load centers in Buildings 779, 679, 588, 197, and 179.	Anticipate construction to begin in 2026
4	Airport area east of U.S. 101	**West Field Cargo Redevelopment (Case No. 2020-008656ENV)** – This project would demolish seven buildings and construct two consolidated cargo/ground service equipment facilities and one ground service equipment facility to accommodate current and future air cargo operations.	Anticipate construction to begin after 2025
5	Airport area east of U.S. 101	**Consolidated Administration Campus Phase 2 (Case No. 2019-006583ETM)** – Implementation of Phase 2 of the Consolidated Administration Campus Program, which includes construction of an approximately 338,000-square-foot office building and a 1,400-stall employee parking garage (1,105 net new parking spaces).	Anticipate construction to begin in 2025
6	Airport area east of U.S. 101	**Plot 10F Demolition and Paving and Cargo Building 662 (Case No. 2022-003521ENV)** – This project will demolish Building 660 (Airport Post Office) and adjacent paved areas and redevelop the site with interim and permanent RON positions, a new Building 662, and an elevated walkway connecting Building 662 to adjacent Airport buildings.	Anticipate construction to begin in 2027
7	Airport area east of U.S. 101	**Boarding Area G Gate Enhancements (Case No. 2023-009342ENV)** – This project will make enhancements at Boarding Area G gates including replacing aging Passenger Boarding Bridges (PBB). Other related components include replacement of associated electrical utilities connected to the PBB, installation of a visual docking guidance system, shifting of aircraft parking envelopes to maximize gate utilization, replacing failing apron pavement, repair and replacement of fire hydrant lines, reconfiguration of fueling hydrant pits, and construction of pedestrian-level access for hard stand operations.	Anticipate construction to begin in 2025

[11] This cumulative project is separate from the proposed project and would replace sets of 12 kV electrical cables that run through a series of underground duct banks, manholes, utility tunnels at the Airport in different locations than the proposed project.

Map Number	Location	Description	Status
8	Airport area east of U.S. 101	**Advanced Water Treatment System Upgrade (Case No. 2020-004658ENV)** – This project would construct and install an advanced water treatment system (AWT) and recycled water tank at the San Francisco International Airport's Mel Leong Treatment Plant (MLTP); and construct a 10-inch distribution pipeline from MLTP to the International Terminal Building (ITB) that would be connected to existing recycled water infrastructure serving the Airport terminal complex, to expand recycled water use throughout the Airport. The proposed pipeline alignment would allow the recycled water pipeline to be connected to recently constructed or improved Airport buildings and enable future connection points to facilities located along West Field Road and North McDonnell Road, such as the Consolidated Administrative Campus, Cargo Building No. 7, and the SFO Grand Hyatt Hotel.	Anticipate construction to begin in 2025
9	Airport area east of U.S. 101	**SFO Recommended Airport Development Plan (Case No. 2017-007468ENV)** – This project would implement the SFO Recommended Airport Development Plan (RADP), which involves a long-range plan to guide the Airport's development. The purpose of the RADP is to plan for forecast passenger and operations growth at SFO through the following measures: maximizing gate capacity, geometry, and flexibility; optimizing lobby and security flows and incorporating new technology for passenger screening; maximizing shared-use facilities and baggage handling system flexibility; and maximizing transfer connectivity for passengers and baggage. The proposed RADP includes recommended projects that would accommodate long-term demand at the Airport and enhance passenger level of service, to be accommodated without any changes to the existing layout of the airfield.	Under review
10	160 El Camino Real (San Bruno)	**160 El Camino Real (San Bruno Application No. AR18-004 & UP18-019)** – Request for an Architectural Review Permit and Use Permit to construct a three-story hotel with 28 guestrooms and basement parking, pursuant to Sections 12.108.010 and 12.96.110.C.4. of the San Bruno Municipal Code.	Application approved

SOURCE: Data provided by SFO and compiled by Environmental Science Associates in 2024; City of San Bruno Major Development Projects, 2023.

SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

12kV Power Distribution Replacement Project

FIGURE 11

CUMULATIVE PROJECTS ON AND WITHIN 0.25 MILE OF THE PROJECT SITE

SECTION C COMPATIBILITY WITH EXISTING ZONING AND PLANS

	Applicable	Not Applicable
Discuss any variances, special authorizations, or changes proposed to the planning code or zoning map, if applicable.	☐	☒
Discuss any conflicts with any adopted plans and goals of the City or region, if applicable.	☒	☐
Discuss any approvals and/or permits from city departments other than the planning department or the Department of Building Inspection, or from regional, state, or federal agencies.	☒	☐

The proposed project would be located entirely on Airport property and would not change or affect the use of the land on which the Airport, including the WOB property, is situated. The proposed project would not require the issuance of a variance or conditional use authorization, nor would it require changes to San Francisco's Planning Code or Zoning Map. Therefore, these issues are not applicable and are not discussed further.

This section describes plans and policies that are generally applicable to the proposed project and discusses whether the proposed project would result in conflicts with applicable plans and policies. Section A.7, Project Approvals, of this initial study identifies anticipated approvals required for implementation of the proposed project. Policy conflicts do not in and of themselves indicate a significant environmental effect pursuant to the California Environmental Quality Act (CEQA), in that the intent of CEQA is to determine the physical impacts of a plan or project on the environment.

The San Francisco Airport Commission and other decision-makers will review the proposed project for consistency with the relevant objectives, policies, and principles of the applicable plan and policy documents. The staff reports and approval motions prepared for decision-makers as part of the proposed project's approval process will include a comprehensive analysis and findings regarding the consistency of the proposed project with applicable plans and policies independent of the environmental review process. Specific plans and policy conflicts identified in this initial study would be referenced in the staff reports prepared for the proposed project's approval. Therefore, the following analysis is intended to summarize relevant planning and policy considerations.

C.1 Adopted Plans and Policies

San Francisco International Airport 1989 Master Plan

The San Francisco International Airport 1989 Draft Final Master Plan was adopted by the San Francisco Airport Commission (airport commission) as the Final Master Plan (Master Plan) in 1992.[12] The Master Plan provides a long-range landside development program for the Airport to accommodate growth in cargo and up to approximately 51 million annual passengers based on the planning horizon and forecast at the time the Master Plan was developed. The objective of the Master Plan is to develop improved facilities and circulation patterns to enhance operational efficiency and accommodate forecast growth at SFO.[13] The major Master Plan improvements implemented to date include:

- The new International Terminal Building (ITB) and associated Boarding Areas A and G, completed in 2000.
- Consolidation and redevelopment of cargo facilities in the North and West Field areas (cumulative project #4).
- An Automated People Mover (APM) system (called AirTrain), the first phase of which was completed in 2003; and the extension of the AirTrain system to serve a replacement consolidated rental car center and long-term public parking garages, completed in 2020.
- Roadway and vehicle circulation improvements to the ITB, completed in 2000.
- Development of an on-Airport hotel, construction of which was completed in 2019.
- Renovation of the former International Terminal (Terminal 2) for domestic operations, completed in 2011.
- Redevelopment of the South Terminal (Harvey Milk Terminal 1), Boarding Area B, which was completed in June 2024, and renovation of Boarding Area C, which is anticipated to be completed in 2026.
- New administration/office facilities:
  - The Consolidated Administration Campus Phase 1 building (Building 674) was completed in 2018.
  - Demolition of the former Design & Construction building (Building 676) is scheduled to occur with construction of the Consolidated Administration Campus Phase 2 administration facility and associated parking garage, which is anticipated to begin in 2025 (cumulative project #5).

The proposed project would not conflict with any of the goals or development projects in the Master Plan.

Airport Land Use Commission and Airport Land Use Compatibility Plan

With limited exceptions, California law requires that every county with an airport in its jurisdiction have an airport land use commission (ALUC). Each ALUC must develop a plan for promoting and ensuring safety, noise, and airspace compatibility between each airport in the county and surrounding land uses. While SFO is physically located on land owned by the City and County of San Francisco, the airport is geographically located in unincorporated San Mateo County and is therefore the designated ALUC according to state

[12] San Francisco Planning Department, *San Francisco International Airport Master Plan Final Environmental Impact Report*, Case No. 86.638E, State Clearinghouse No. 90030535, May 1992, and San Francisco Airport Commission, Resolution No. 92-0284, adopted November 3, 1992.
[13] The San Francisco International Airport 1989 Master Plan excluded West of Bayshore, the area west of U.S. 101.

statute.[14] In San Mateo County, the City/County Association of Governments of San Mateo County (C/CAG) Board acts as the ALUC. The purpose of the ALUC is "to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses."[15] Under California law, the ALUC has three primary responsibilities: to coordinate airport land use compatibility planning efforts at the state, regional, and local levels; to prepare and adopt an airport land use compatibility plan for each public-use airport in its jurisdiction; and to review plans, regulations, and other specified actions of local agencies and airport operators.

Based on state law and guidance provided in the California Airport Land Use Planning Handbook,[16] the *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport* (SFO ALUCP),[17] adopted in November 2012, has four primary policies that were adopted by the ALUC and were required to be codified in each city's zoning code within San Mateo County:

- *Aircraft Noise Impact Reduction* – To reduce the potential number of future Airport area residents who could be exposed to noise impacts from Airport and aircraft operations. The noise compatibility policies are to (1) protect the public health, safety, and welfare by minimizing exposure of residents and occupants of future noise-sensitive development to excessive noise; and (2) protect the public interest in providing for orderly development of SFO by ensuring that new development in the Airport environs complies with all requirements necessary to ensure compatibility with aircraft noise in the area. The intent is to avoid the introduction of new incompatible land uses into the Airport's "noise impact area."
- *Safety of Persons on the Ground and in Aircraft in Flight* – To minimize the potential number of future residents and land use occupants exposed to hazards related to aircraft operations and accidents. The safety compatibility policies are to (1) protect the public health, safety, and welfare by minimizing the public's exposure to the risk associated with potential aircraft accidents in the Airport vicinity; and (2) protect the public interest in providing for the orderly development of SFO by preventing creation of new safety problems in the Airport environs.
- *Height Restrictions/Airspace Protection* – To protect the navigable airspace around the Airport for the safe and efficient operation of aircraft in flight. The airspace protection policies are to (1) protect the public health, safety, and welfare by minimizing public's exposure to potential safety hazards that could be created through the construction of tall structures; and (2) protect the public interest in providing for the orderly development of SFO by ensuring that new development in the Airport environs avoids compromising the airspace in the airport vicinity. This avoids the degradation in the safety, utility, efficiency, and air service capability of the airport that could be caused by the attendant need to raise visibility minimums, increase minimum rates of climb, or cancel, restrict, or redesign flight procedures.
- *Land Use Policies*– Land Use Policy 1 established real estate disclosure notices for all properties within San Mateo County, where aircraft could overfly to and from SFO at least once per week at altitudes 10,000 feet or less above mean sea level. Land Use Policy 2 established an area where the ALUC shall

[14] California Public Utilities Code section 21670, https://codes.findlaw.com/ca/public-utilities-code/puc-sect-21670/#:~:text=Every%20county%2C%20in%20which%20there,the%20appropriate%20airport%20operators%20and, accessed February 5, 2025.
[15] California Public Utilities Code section 21670, https://codes.findlaw.com/ca/public-utilities-code/puc-sect-21670/#:~:text=Every%20county%2C%20in%20which%20there,the%20appropriate%20airport%20operators%20and, accessed October 10, 2024.
[16] California Department of Transportation, Division of Aeronautics, 2011, California Airport Land Use Planning Handbook, https://dot.ca.gov/-/media/dot-media/programs/aeronautics/documents/californiaairportlanduseplanninghandbook-a11y.pdf, accessed October 10, 2024.
[17] The City/County Association of Governments of San Mateo County (C/CAG), 2012, Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport, November 2012, https://ccag.ca.gov/wp-content/uploads/2014/10/Consolidated_CCAG_ALUCP_November-20121.pdf, accessed October 10, 2024.

exercise its statutory duties to review proposed land use policy actions and land development proposals. This policy area is based on a combination of the outer boundaries of the noise compatibility and safety zones, the Code of Federal Regulations (CFR), title 14, part 77 conical surface, and the Terminal Instrument Procedures (TERPS)[18] approach and One-Engine Inoperative[19] departure surfaces surrounding the airport.

The proposed project would not conflict with any policies of the ALUCP.

San Francisco General Plan

The San Francisco General Plan provides general policies and objectives to guide land use decisions. The general plan contains 10 elements: commerce and industry, recreation and open space, housing, community facilities, urban design, environmental protection, transportation, air quality, safety and resiliency, and arts. These elements of the general plan set forth goals, policies, and objectives for physical development of the city. The general plan also contains many area plans, which provide more specific policy direction for certain neighborhoods, primarily on the east side of the city. The City's general plan is underpinned by the Environmental Justice Framework, which articulates the City's broad visions and priorities related to environmental justice and provides guidance to City agencies on how they can address it in their work.

With regard to the Airport, the general plan includes transportation policies 5.1 through 5.3. These policies recommend supporting and accommodating the expansion of SFO, while balancing this expansion with protection of the quality of life in the communities that surround the Airport; encouraging the development of direct transit connections from downtown San Francisco to the Airport that will maximize convenience and minimize confusion for Airport patrons; and encouraging the development of a high-speed water transit system to SFO to improve the efficiency and flexibility of the Airport's role in accommodating large numbers of domestic and international passengers. The proposed project would not conflict with any of the goals and policies set forth in the general plan.

Other Local Plans and Policies

Other local plans and policies of neighboring jurisdictions that are in the vicinity of or overlap with the project site are discussed in this section. Although the Airport as a department of the City and County of San Francisco is not subject to the plans and policies of these neighboring jurisdictions,[20] they are included for informational purposes.

- **San Bruno General Plan.** San Bruno is in northern San Mateo County just west of the Airport. The city stretches 3.5 miles from the relatively flat eastern areas along U.S. 101 to the hilly western neighborhoods, which are located on the east-facing slope of the Coast Ranges, gaining almost 1,200 feet in elevation. Correspondingly, the eastern portion of the city is more urbanized and has a greater mix of land uses, while the western portion is occupied primarily by low-density residential development and

[18] Imaginary airspace surfaces established according to the criteria published in FAA Order 8260.3B, U.S. Standard for Terminal Instrument Procedures (TERPS). The surfaces are designed to ensure the safe separation of aircraft operating under instrument procedures from manmade and natural obstructions. The term, TERPS, is also used more generally in reference to the applicable FAA order.
[19] Procedures required of commercial operators of multi-engine aircraft, mandated by federal regulation, that allow aircraft to safely climb after takeoff with the complete loss of power to one engine.
[20] San Francisco International Airport, owned by the City and County of San Francisco, is not subject to the land use requirements of other jurisdictions, even if the land use occurs within the geographical boundaries of another jurisdiction. California Government Code sections 53090 and 53091 grant a city or county intergovernmental immunity from complying with another governmental body's zoning and building permit laws. California Government Code Section 53090–53091, https://law.justia.com/codes/california/2022/code-gov/title-5/division-2/part-1/chapter-1/article-5/section-53090/, accessed September 30, 2024.

open space. The current San Bruno General Plan was adopted in 2009 and includes numerous policies related to SFO, including policies concerning aircraft noise, Airport-related traffic, aircraft hazards, and land use compatibility. The San Bruno General Plan Open Space and Recreation Policy 26 notes that the WOB property should be retained for open space for preservation of endangered wetlands species.[21] The proposed project would not conflict with any of the goals or policies of the San Bruno General Plan.

- **Millbrae General Plan.** Millbrae is in San Mateo County just west of the Airport. The boundaries of Millbrae extend from roughly U.S. 101 to the east to Interstate 280 (I-280) to the west, and Murchison Drive to the south to Bayview Avenue to the north. The current Millbrae General Plan was adopted in 2022 and includes numerous policies related to SFO, including policies concerning aircraft noise and aircraft hazards. The proposed project would not conflict with any of the goals or policies of the Millbrae General Plan.
- **County of San Mateo General Plan and Zoning.** Although the Airport is physically located in San Mateo County, it is owned and operated by the City and County of San Francisco. The County of San Mateo General Plan, last amended in 1986, includes general land use designations and policies pertaining to the Airport.[22] The Airport is designated in the general plan as the San Francisco International Airport Special Urban Area. The general plan's land use objective for this special urban area is defined in Urban Land Use Policy 8.4.b, stating that SFO is to maintain current uses and allow redevelopment and expansion if compatible with adjacent land uses and other general plan policies. The general plan also notes that SFO land west of U.S. 101 designated for Airport use is intended to be used for Airport/transportation-related facilities. The proposed project would not conflict with any of the goals or policies of the County of San Mateo General Plan.

  Under the County of San Mateo Zoning Ordinance, the Airport is identified as Light Industrial (M-1). The proposed project would not conflict with this identification.[23]

Regional Plans

In addition to local general plans and related documents, regional environmental, transportation, and land use plans and policies consider the growth and development of the nine-county San Francisco Bay Area (bay area). Some of these plans and policy documents are advisory, and some include specific goals and provisions that must be adhered to when evaluating a project under CEQA. These regional plans are summarized below.

- **Bay Area Air Quality Management District Plans.** The most recently adopted air quality plan in the San Francisco Bay Area Air Basin is the 2017 Clean Air Plan, which the Bay Area Air Quality Management District (air district) adopted in April 2017.[24] The 2017 Clean Air Plan requires projects to implement "all feasible measures" to reduce ozone; provide a control strategy to reduce ozone, particulate matter, toxic air contaminants, and greenhouse gas emissions in a single, integrated plan; review progress in improving air quality in recent years; and eliminate health risk disparities from exposure to air pollution among bay area communities. The 2017 Clean Air Plan and physical environmental impacts of the proposed project related to attainment of air quality standards are addressed in Section E.8, Air Quality, of this initial study.

[21] City of San Bruno General Plan, adopted March 24, 2009, https://www.sanbruno.ca.gov/629/General-Plan, accessed September 30, 2024.
[22] County of San Mateo General Plan, adopted November 18, 1986, https://www.smcgov.org/planning/general-plan, accessed September 30, 2024.
[23] County of San Mateo Zoning Regulations, October 17, 2023, https://www.smcgov.org/planning/zoning-regulations, accessed September 30, 2024.
[24] Bay Area Air Quality Management District, 2017 Clean Air Plan: Spare the Air, Cool the Climate, April 19, 2017, http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en, accessed September 30, 2024.

In addition, Section E.8, Air Quality, of this initial study presents the evaluation of potential air quality impacts of the proposed project with respect to the air district's 2022 CEQA Air Quality Guidelines.[25]

- **California Regional Water Quality Control Board Plans.** Water quality control plans (basin plans) provide the basis for protecting water quality in California. Basin plans are mandated by both the federal Clean Water Act and the state Porter-Cologne Water Quality Control Act (the Water Code). Water Code sections 13240 through 13249 specify the required contents and procedures for adopting a regional basin plan. Each plan must contain water quality objectives that, in the judgment of the regional water quality control board (regional board), will ensure the reasonable protection of beneficial uses and the prevention of nuisances. The plan must also contain an implementation program for achieving those objectives, including a description of the nature of actions necessary to achieve the objectives, time schedules for the actions to be taken, and a description of surveillance to be undertaken to determine compliance with objectives. The goal of the San Francisco Bay Basin Plan (Basin Plan) is to provide a definitive program of actions designed to preserve and enhance water quality and to protect beneficial uses of water in San Francisco Bay, which include industrial service supply, commercial and sport fishing, shellfish harvesting, estuarine habitat, fish migration, preservation of rare and endangered species, fish spawning, wildlife habitat, water contact recreation, water non-contact recreation, and navigation.[26] The Basin Plan is used as a regulatory tool by the San Francisco Bay regional board's technical staff. Regional board orders cite the Basin Plan's water quality standards and prohibitions applicable to a particular discharge. The Basin Plan is also used by other agencies in their permitting and resource management activities. It also serves as an educational and reference document for dischargers and members of the public. The proposed project was reviewed in the context of the San Francisco Bay regional board's Basin Plan, and no potential conflicts were identified. (See Topic E.17, Hydrology and Water Quality, of this initial study for a more detailed discussion of the proposed project's impacts related to water quality.)

C.2 Approvals and Permits

See Section A.7, Project Approvals, for a list of anticipated approvals from federal, state, and local agencies.

[25] Bay Area Air Quality Management District, 2022, California Environmental Quality Act Air Quality Guidelines, https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines, accessed September 30, 2024.
[26] San Francisco Bay Regional Water Quality Control Board, 2017, *Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin*, https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html, accessed September 30, 2024.

SECTION D SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more-detailed checklist and discussion of each environmental factor.

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

D.1 Approach to Environmental Review

This initial study examines the proposed project to identify potential effects on the environment. For each item on the initial study checklist, the evaluation considered the impacts of the proposed project both individually and cumulatively, with the exception of greenhouse gas emissions, which are evaluated only in the cumulative context. All items on the initial study checklist that have been checked "Less than Significant Impact with Mitigation Incorporated," "Less than Significant Impact," "No Impact," or "Not Applicable," indicate that, upon evaluation, staff has determined that the proposed project could not have a significant adverse environmental effect related to that topic. A discussion is included for those issues checked "Less than Significant Impact with Mitigation Incorporated" and "Less than Significant Impact" and for most items checked "No Impact" or "Not Applicable." For all of the items checked "No Impact" or "Not Applicable" without discussion, the conclusions regarding potential significant adverse environmental effects are based upon field observation, staff experience, and expertise on similar projects, and/or standard reference material available within the planning department, such as the department's Transportation Impact Analysis Guidelines for Environmental Review, or the California Natural Diversity Database and maps, published by the California Department of Fish and Wildlife.

For the analysis of potential cumulative effects, each environmental topic herein briefly identifies the cumulative context relevant to that topic. For example, for shadow impacts, the cumulative context would be nearby projects that could contribute to cumulative shadow effects on the same open space affected by the proposed project. In other cases, such as air quality, the context would be the San Francisco Bay Basin.

SECTION E EVALUATION OF ENVIRONMENTAL EFFECTS

E.1 Land Use and Planning

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
1. LAND USE AND PLANNING. Would the project:					
a) Physically divide an established community?	☐	☐	☐	☒	☐
b) Cause a significant physical 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?	☐	☐	☒	☐	☐

The project site consists of portions of both SFO's WOB property and a portion of the Airport area east of U.S. 101, which are primarily located in unincorporated San Mateo County. The WOB property is a 180-acre undeveloped tract of land immediately east of the cities of San Bruno and Millbrae that provides habitat and wetland areas for sensitive species such as the California red-legged frog and the San Francisco garter snake. U.S. 101 separates the WOB property from the operational portion of the Airport. The WOB property is bounded by residential developments to the west, San Bruno Avenue to the north, the Highline Canal to the south, and U.S. 101 to the east.

The portion of the project site located on the WOB property is generally undeveloped but contains critical infrastructure that supports Airport operations:

- Aboveground infrastructure consists of high-voltage electrical transmission lines operated and maintained by PG&E, transformers operated and maintained by SFPUC, and SFO electrical substations, including Substation BA.
- Existing improved and unimproved access roads cross the project site within the WOB property.
- Underground infrastructure and utilities include water mains, high-pressure natural gas lines, storm drainage facilities, sanitary sewer lines, and telecommunications lines.
- Existing aboveground manhole covers are located throughout the project site within the WOB property, with underground manholes allowing access to below-grade infrastructure. The portion of the project site within the Airport area east of U.S. 101 is located around manhole PD-B660.
- The WOB property supports annual grassland, ornamental (primarily eucalyptus), seasonal wetland, willow riparian, and freshwater marsh plant communities. Higher elevations on the site typically support annual grassland, while lower elevations are dominated by seasonal wetlands and marshlands, with riparian corridors lining the water channels throughout the site.

Impact LU-1: The proposed project would not physically divide an established community. ***(No Impact)***

The division of an established community typically involves constructing a physical barrier to neighborhood access, such as a new freeway, or removing a means of access, such as a bridge or a roadway. The proposed project would involve the removal and replacement of electrical infrastructure and related improvements on a site that contains electrical and related infrastructure serving the Airport. Specifically, the proposed project would include site preparation, the improvement and construction of onsite gravel access roads, construction of gravel access pads around five manholes, raising of manhole lids up to 33 inches, dewatering of electrical vaults/manhole structures, and removal of existing cables and installation of new armored cables within existing underground duct banks.

There are no residential neighborhoods or communities on the project site, and the proposed project would not result in the construction of a physical barrier to access or the removal of an existing means of access to neighborhoods or communities adjacent to the project site. Therefore, the proposed project would not physically divide an established neighborhood or community, and ***no impact*** related to this significance criterion would occur.

Impact LU-2: The proposed project would not cause a significant physical 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)***

Land use impacts could be considered significant if the proposed project would conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact. Environmental plans and policies are those that directly address environmental issues and/or contain targets or standards that must be met to preserve or improve the characteristics of the physical environment. Conflicts with plans, policies, and regulations do not necessarily indicate a significant environmental land use impact under CEQA, unless the project would substantially conflict with a land use plan or policy that was adopted for the purpose of avoiding or mitigating an environmental effect, such that a substantial adverse physical change in the environment would result. To the extent that such substantial physical environmental impacts may result from such conflicts, this initial study discloses and analyzes the physical impacts under the relevant environmental topic sections.

As discussed in Section C, Compatibility with Existing Zoning and Plans, implementation of the proposed project would not conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, this impact would be ***less than significant***.

Impact C-LU-1: The proposed project in combination with cumulative projects would not result in a significant cumulative impact related to land use and planning. ***(Less than Significant)***

The geographic context for the analysis of potential cumulative impacts related to land use and planning consists of the conservation, infrastructure, and development projects generally located on and within 0.25 mile of the project site. Those projects are listed in Table 7, p. 23, and mapped on Figure 11, p. 26.

The proposed project would not physically divide an established community, and therefore would have no potential to combine with cumulative projects to result in a significant physical environmental impact

related to the division of an established community. In addition, the cumulative projects either would maintain existing land uses in the project vicinity or, if a land use change is proposed, would be required to comply with applicable land use plans, policies, and regulations, like the proposed project.

Implementation of the proposed project in combination with the cumulative projects would be consistent with relevant plans and policies adopted for the purpose of avoiding or mitigating an environmental impact. Therefore, this impact would be ***less than significant***.

E.2 Aesthetics

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
2. AESTHETICS. 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 points.) 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 daytime or nighttime views in the area?	☐	☐	☐	☒	☐

The project site consists of portions of both SFO's WOB property and the Airport area east of U.S. 101. The portion of the project site located on the WOB property is visible from certain vantage points from neighborhoods, roadways, and related uses west and north of the project site, but most views are limited or obscured entirely by buildings, trees, topography, elevated transportation infrastructure, or other built or natural features. More expansive but short-duration views of the portion of the project site on the WOB property are available from vehicles traveling on U.S. 101.

The portion of the project site on the WOB property is visually characterized by expanses of grassland interspersed with seasonal wetlands to the west, and by wetlands and marshland to the east. Existing access roads, both improved and unimproved, also cross the project site within the WOB property. Stands of mature

trees are present on the western and the northwestern edges of the project site. The most noticeable aboveground infrastructure consists of approximately 115-foot-tall, high-voltage electrical transmission lines and their supporting metal towers on the eastern portion of the site. Aboveground manhole covers are located throughout the project site within the WOB property. Access roads are present in the western portion of the site. SFO electrical Substation BA is located in the northern portion of the project site within the WOB property. The substation consists of paved surfaces with an approximately 15-foot-tall, single-story electrical utility building and related electrical infrastructure enclosed by chain-link fencing and/or concrete walls. **Figure 12** through **Figure 15**, p. 41, provide a viewpoint map and representative photographs of the portion of the project site on the WOB property.

The portion of the project site within the Airport area east of U.S. 101 is located around manhole PD-B660 in the parking lot for Building 585, between Building 602 and Building 585. This portion of the project site is visually characterized as a paved area flanked by single-story utilitarian buildings.

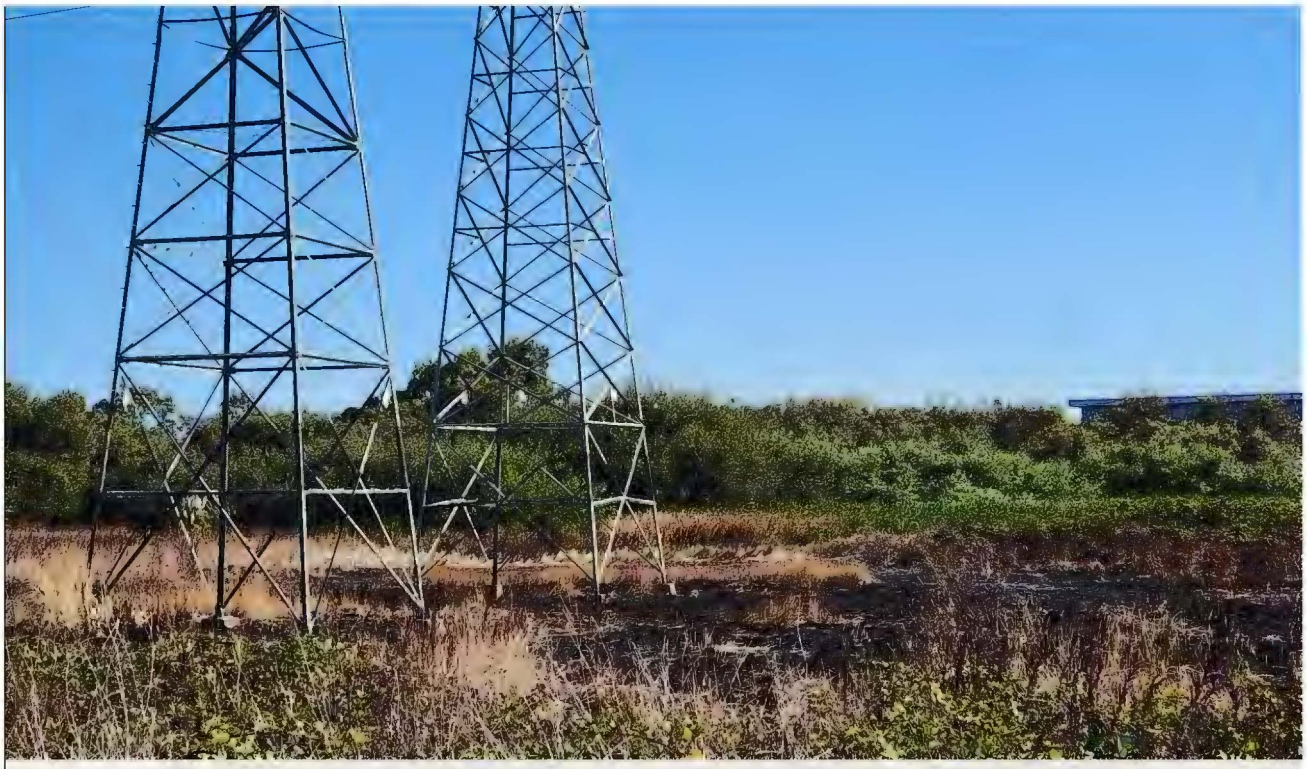
Impact AE-1: The proposed project would not have a substantial adverse effect on a scenic vista. (*Less than Significant*)

Scenic vistas are publicly accessible locations that offer unique, exemplary, and often panoramic views of natural features or significant structures and buildings. The project site is on a portion of SFO property that is not publicly accessible and does not contain or offer public views of significant natural features, structures, or buildings. The proposed project would involve removing and replacing electrical infrastructure and conducting related improvements on a site that contains existing electrical and related infrastructure that serves the Airport. Specifically, the proposed project would include improvement and construction of onsite gravel access roads, construction of gravel access pads around five manholes, raising of manhole lids up to 33 inches, dewatering of electrical vaults/manhole structures, removal of existing cables and installation of new armored cables within existing underground duct banks, and removal of approximately 27 trees. None of these project components would introduce new physical elements that could have a substantial adverse effect on a scenic vista. The existing visual character and quality of the site would remain relatively unchanged with implementation of the proposed project. Therefore, the proposed project would not have a substantial adverse effect on a scenic vista, and this impact would be ***less than significant***.

SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

12kV Power Distribution Replacement Project

FIGURE 12
PROJECT SITE VIEWPOINT LOCATIONS



Viewpoint 1: PG&E transmission towers within the project site. View facing east.

Viewpoint 2: PG&E transmission towers and wetland area within the project site. View facing south.

SOURCE: ESA, 2024

12 kV Power Distribution Replacement Project

FIGURE 13
PROJECT SITE VIEWS

Viewpoint 3: Manhole PD-B502 cover within the project site.

Viewpoint 4: Manhole PD-B503 location within the project site.

SOURCE: ESA, 2024

12 kV Power Distribution Replacement Project

FIGURE 14
PROJECT SITE VIEWS

Viewpoint 5: Existing SFO private access road within the project site.

Viewpoint 6: SFO electrical Substation BA on the northern portion of the project site.

SOURCE: ESA, 2024

12 kV Power Distribution Replacement Project

FIGURE 15
PROJECT SITE VIEWS

Impact AE-2: The proposed project would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway. (*No Impact*)

No state-designated scenic highways are located on or adjacent to the Airport property. The closest designated state scenic highway is Interstate 280, approximately 1 mile west of the project site.[27] The existing visual character and quality of the site would remain relatively unchanged with implementation of the proposed project. For this reason, the proposed project would have ***no impact*** related to damaging scenic resources within a state scenic highway corridor.

Impact AE-3: The proposed project would not conflict with applicable zoning and other regulations governing scenic quality. (*Less than Significant*)

Because the project site is in an urbanized area, implementation of the proposed project would have a significant adverse environmental effect on visual character and quality if it would conflict with applicable zoning and other regulations governing scenic quality. As discussed under Section C, Compatibility with Existing Zoning and Plans, of this initial study, although the Airport is in San Mateo County, it is owned and operated by SFO and is not subject to the land use requirements of other jurisdictions. However, a discussion of implementing the proposed project within the context of the County of San Mateo General Plan is provided herein for informational purposes.

The County of San Mateo General Plan, last amended in 1986, includes general land use designations and policies pertaining to the Airport.[28] The general plan designates the Airport as the San Francisco International Airport Special Urban Area. Urban Land Use Policy 8.4.b defines the general plan's land use objective for this special urban area, stating that SFO is to maintain current uses and allow redevelopment and expansion if compatible with adjacent land uses and other general plan policies. The general plan also notes that SFO land west of U.S. 101 that is designated for Airport use is intended to be used for Airport/transportation-related facilities. Visual Quality Policy 4.36 sets forth the objective to maintain and, where possible, improve upon the appearance and visual character of development in urban areas and ensure that new development in urban areas is designed and constructed to contribute to the orderly and harmonious development of the locality.

Under the County of San Mateo Zoning Ordinance, SFO is identified as Light Industrial (M-1).[29]

Even though SFO is not subject to the land use requirements of other jurisdictions, the proposed project would not conflict with any applicable zoning and other regulations governing scenic quality because although the proposed project would slightly intensify the existing types of uses in the area, such changes would not be expected to adversely affect scenic quality. For these reasons, implementation of the proposed project would not substantially conflict with County of San Mateo General Plan policies, zoning, or other applicable regulations concerning scenic quality, and this impact would be ***less than significant***.

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[27] California Department of Transportation, Scenic Highways, https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways, accessed September 30, 2024.
[28] County of San Mateo, General Plan, adopted November 18, 1986, https://www.smcgov.org/planning/general-plan, accessed September 30, 2024.
[29] County of San Mateo, Zoning Regulations, October 17, 2023, https://www.smcgov.org/planning/zoning-regulations, accessed September 30, 2024.

Impact AE-4: The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (*No Impact*)

The proposed project would not result in the construction of new buildings or structures that would include lighting, windows, or other reflective surfaces. Therefore, the proposed project would not introduce new sources of substantial light or glare to the site or involve nighttime use of construction equipment. As such, ***no impact*** related to this significance criterion would occur.

Impact C-AE-1: The proposed project in combination with cumulative projects would not result in a cumulative impact related to aesthetics. (*Less than Significant*)

The geographic context for the analysis of potential cumulative impacts related to aesthetics consists of the conservation, infrastructure, and development projects generally located on and within 0.25 mile of the project site. Those projects are listed in Table 7, p. 23, and mapped in Figure 11, p. 26.

Cumulative Airport projects include the San Francisco Garter Snake Recovery Action Plan (RAP), utility infrastructure improvements, and new on-Airport buildings and other aboveground structures. These cumulative Airport projects are not anticipated to substantially obstruct scenic views of San Francisco Bay, San Bruno Mountain, or the East Bay hills from publicly accessible areas, as they would be limited in height because of airspace restrictions. Because these cumulative Airport projects would be developed and designed to support Airport operations, they would be compatible with the existing visual character and quality of the area and would not create new sources of substantial light or glare.

The 160 El Camino Real project would construct a three-story hotel in San Bruno, approximately 0.25 mile west of the project site. This cumulative project is not visually connected to the project site and would not combine with the proposed project to result in a significant cumulative impact on scenic vistas or substantially degrade the existing visual character or quality of the area, nor would it combine to create new sources of substantial light or glare that would affect views in the area. Therefore, cumulative impacts related to aesthetics would be ***less than significant***.

E.3 Population and Housing

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
3. POPULATION AND HOUSING. 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 units, necessitating the construction of replacement housing?	☐	☐	☐	☐	☒

The proposed project would not displace any residents or housing units because no residential uses or housing units currently exist on the project site. Therefore, topic E.3(b) related to housing and population displacement ***does not apply*** and is not discussed further.

Approach to Analysis

Population growth is considered in the context of local and regional population, housing, and employment projections. Generally, a project that induces population growth is not viewed as having a significant impact on the environment unless the physical changes needed to accommodate project-related population growth would have adverse impacts on the environment. CEQA Guidelines section 15064(e) states that an economic or social change by itself would not be considered a significant effect on the environment.

An *indirect environmental impact* is a change to the physical environment that is not immediately related to the project.[30] Specifically, project-related growth-inducing effects include ways in which a project could foster economic or population growth or the construction of additional housing, either directly or indirectly. Projects that would remove obstacles to population growth (e.g., a major expansion of a wastewater treatment plant) might, for example, allow development to occur in an area that was not previously considered feasible for development because of infrastructure limitations.[31] Because implementation of the proposed project would not include new housing or new permanent employment, this analysis focuses on potential impacts related to population and housing during the construction of the proposed project.

[30] CEQA Guidelines section 15064(d)(2).
[31] CEQA Guidelines section 15126.2(d).

Impact PH-1: The proposed project would not induce substantial unplanned direct or indirect population growth. *(Less than Significant)*

Construction

The proposed project would result in a temporary increase in construction workers onsite (a total of approximately 52 workers with a maximum of 26 workers onsite during the access road and access pad installation phases) during the approximately 36-month construction period.[32] According to the California Employment Development Department, the San Francisco–Redwood City–South San Francisco Metropolitan Division (San Francisco and San Mateo counties) had an annual average of 40,900 construction jobs in 2023.[33] According to the Association of Bay Area Governments, the number of new construction jobs added to the nine-county bay area region is expected to increase by approximately 100,000 by 2050, for a total of approximately 300,000 construction jobs in 2050.[34] The proposed project's workforce demand would be small relative to the county and regional labor supply. Although some workers might relocate from other areas, the population increase would be negligible and temporary, limited to the construction period. Furthermore, given the varied skills represented in the regional labor market, the demand for construction employment would likely be met within the bay area's existing and projected labor market.

Construction industry jobs generally have no regular place of business, and many construction workers are highly specialized (e.g., forklift operators, electricians). Thus, construction workers' commutes to jobsites throughout the region may change several times a year, as dictated by demand for their specific skills. The work requirements of most construction projects are also highly specialized, and workers are employed on a job site only as long as their skills are needed to complete a particular construction task. It is anticipated that construction workers not already living in San Francisco, the East Bay, or San Mateo County would commute from their residences elsewhere in the bay area rather than permanently relocating to the project vicinity from more distant locations. Because this type of construction work is temporary, filling these jobs with existing bay area residents is typical for employers in various construction trades. Once construction is complete, construction workers typically seek employment at other jobsites in the region that require their particular skills.

Thus, construction of the proposed project would not generate a substantial permanent population increase in the project vicinity or region. Construction of the proposed project would not directly or indirectly induce substantial unplanned population growth or require the construction of housing to accommodate such growth. Therefore, this impact would be ***less than significant***.

Operation

In general, a project would be considered growth-inducing if its implementation were to result in substantial population increases and/or new development that might not occur if the project were not implemented. As mentioned above, project-related growth-inducing effects include ways in which a project could foster economic or population growth or the construction of additional housing, either directly or indirectly.

[32] Because of the similarity of construction activities performed in each phase, this analysis assumes that the access road and access pad phases would have the same workforce, and that the cable removal and installation phases would have the same workforce.
[33] California Employment Development Department, Employment by Industry Data, https://labormarketinfo.edd.ca.gov/data/employment-by-industry.html, accessed September 25, 2024.
[34] Metropolitan Transportation Commission and Association of Bay Area Governments, *Plan Bay Area 2050: Forecasting and Modeling Report*, October 2021, p. 22, https://planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_Forecasting_Modeling_Report_October_2021.pdf, accessed September 25, 2024.

Projects that would remove obstacles to population growth (e.g., a major expansion of a wastewater treatment plant) might, for example, indirectly allow development to occur in an area that was not previously considered feasible for development because of infrastructure limitations.[35]

The proposed project would involve the replacement of electrical infrastructure and associated site access improvements and would not include the construction of any new homes or businesses on the project site. After construction of the proposed project, operation and maintenance would be performed by existing SFO staff. As a result, the proposed project would not result in new permanent employees and would not cause direct employment growth.

Because the 12 kV electrical cables would be replaced with the same voltage, there would be no capacity increase, and the total energy delivered to serve the load at the Airport would not change because of the proposed project. Therefore, no indirect population growth would result from the proposed project. For these reasons, the proposed project would have ***no impact*** related to substantial unplanned direct or indirect population growth during operation.

Impact C-PH-1: The proposed project in combination with cumulative projects would not result in a significant cumulative impact related to population and housing. ***(Less than Significant)***

The geographic context for the analysis of potential cumulative impacts related to population and housing encompasses the bay area. As discussed above, construction jobs in the nine-county bay area region are projected to increase by approximately 100,000 by 2050. The proposed project would require a maximum of 26 construction workers onsite during any given project construction phase, with the most workers being present during the access road installation and access pad installation phases. This represents 0.044 percent of the anticipated regional employment growth in the construction sector through 2050. Given the low percentage increase in anticipated construction employment growth with implementation of the proposed project, the proposed project would not combine with cumulative projects to result in substantial unplanned direct or indirect population growth related to employment. Therefore, the cumulative impact related to employment population growth would be ***less than significant***.

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[35] CEQA Guidelines section 15126.2(d).

E.4 Cultural Resources

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
4. CULTURAL RESOURCES. Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code?	☐	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	☐	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐	☐

Regulatory Framework

This section summarizes the plans and policies of federal, state, and local agencies that have regulatory oversight regarding cultural resources—architectural resources, archeological resources, and human remains—within the project site.

California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects in California. To be considered a historic resource, a property must generally be at least 50 years old; when acting as the CEQA lead agency, the planning department uses a threshold of 45 years. A *historical resource* is defined in CEQA Guidelines section 15064.5 as a cultural resource (i.e., a built-environment resource, archeological resource, or human remains) that meets at least one of the following criteria:

- A resource listed in, or determined by the State Historical Resources Commission to be eligible for listing in, the California Register.
- A resource included in a local register of historical resources, as defined in Public Resources Code section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of Public Resources Code section 5024.1(g). Such a resource shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Such a resource may be considered to be a historical resource, provided that the lead agency's determination is supported by substantial

evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register.

The fact that a resource is not listed in or determined to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to Public Resources Code section 5020.1[k]), or identified in a historical resources survey (meeting the criteria in Public Resources Code section 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is neither included in any federal, state, or local register nor identified in a qualifying historic resources survey, a lead agency may still determine that the resource is a historic resource for the purposes of CEQA if there is substantial evidence supporting such a determination. The lead agency must consider the resource historically significant if it finds that the resource meets the criteria for listing in the California Register.

CEQA requires a lead agency to determine whether a project would have a significant effect on important historic resources or unique archeological resources. The CEQA Guidelines note that if a resource is neither a unique archeological resource nor a historic resource, the effects of the project on that resource shall not be considered a significant effect on the environment. Projects that comply with the Secretary's Standards benefit from a regulatory presumption under CEQA that they would have a less-than-significant impact on a historic resource. Projects that do not comply with the Secretary's Standards may or may not cause a substantial adverse change in the significance of a historic resource and must be subject to further analysis to assess whether they would result in material impairment of a historic resource's significance.

Treatment of Human Remains

Under state law, human remains and associated burial items may be significant resources in two ways. They may be significant to descendant communities because of lineage connections or for patrimonial, cultural, lineage, or religious reasons. They also may be important to both the descendant communities and the scientific community (e.g., historians, prehistorians, epidemiologists, physical anthropologists, and ethnographers) for their potential to provide significant information about Native American and post-European contact populations.

The specific rights of descendant groups related to the treatment of ancestral burials is a matter of law—such as, for Native Americans, laws pertaining to Native American historical, cultural, and sacred sites (CEQA Guidelines section 15064.5[d]; Public Resources Code section 5097.98). The concerns of the associated descendant group regarding the appropriate treatment and disposition of discovered human burials may become known only through outreach. Decisions about the appropriate treatment, study, and disposition of human remains and associated burial items may be considered only through consultation between the project sponsor and the descendant and scientific communities, and may be arrived at only with the concurrence of descendant communities.

With respect to the potential discovery of human remains, California Health and Safety Code section 7050.5 states that any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Public Resources Code section 5097.99. Also, the knowing or willful

possession of Native American human remains or artifacts taken from a grave or *cairn*[36] is a felony under California law (Public Resources Code section 5097.99). These provisions do not apply to any person carrying out an agreement developed pursuant to Public Resources Code section 5097.94(l), or to any person authorized to implement Public Resources Code section 5097.98.

CEQA, and other state regulations concerning Native American human remains, provide the following procedural requirements to assist in avoiding potential adverse effects on human remains, within the context of their value to both descendant communities and the scientific community:

(1) When an initial study identifies the existence of Native American human remains or the probable likelihood that a project would affect Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the Native American Heritage Commission to develop an agreement for the treatment and disposal of the human remains and any associated burial items (CEQA Guidelines section 15064.5[d]; Public Resources Code section 5097.98).

(2) In the event of discovery or recognition of human remains in any location other than a dedicated cemetery, the project's head foreman and/or the project sponsor must immediately notify the county coroner (in San Francisco, the Medical Examiner). In San Francisco, the planning department's Environmental Review Officer also must be notified. No further excavation or disturbance may occur at the site or in any nearby area reasonably suspected to overlie remains until the county coroner has determined, in accordance with Government Code title 3, division 2, part 3, chapter 10 (commencing with section 27460), that the remains are not subject to the provisions of Government Code section 27491 or any other related provisions of law concerning investigation of the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or that person's authorized representative.

   (a) If the coroner determines that the remains are not subject to his or her authority and recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the coroner must contact the Native American Heritage Commission by phone within 24 hours (California Health and Safety Code section 7050.5).

   (b) After notification, following the procedures outlined in Public Resources Code section 5097.98, the Native American Heritage Commission must identify and notify the most likely descendant, who must make recommendations for treatment of the remains within 48 hours of being granted access to the discovery.

Environmental and Geologic Setting

The project site is within the Coast Ranges geomorphic province, characterized by northwest-southeast trending valleys and ridges. These are controlled by folds and faults that resulted from the collision of the Farallon and North American plates, and from subsequent strike-slip faulting and shearing along the San Andreas Fault system. The San Francisco Peninsula's geology is characterized by rugged hills of Jurassic- to Cretaceous-age bedrock surrounded by low-lying, flat areas that are overlain by Quaternary sedimentary deposits. Bedrock consists of highly deformed and fractured sedimentary rocks of the Franciscan assemblage.

[36] A *cairn* is a mound or rough stones built as a memorial or landmark.

Within the project site, artificial fill extends from the ground surface to approximately 2–8 feet below ground surface.[37] The artificial fill is underlain by Young Bay Mud, a deposit of soft to medium stiff unconsolidated silty clay. Available subsurface information from geotechnical borings on the project site and vicinity confirms the geological mapping. Groundwater depth was reported to be between 6 and 10.5 feet.

The 1869 United States Coastal Survey map of the San Francisco Peninsula shows pre–20th century tidelands margins on the project site.

Pre-contact Archeological Context

Categorizing the prehistoric period into cultural stages allows researchers to describe a broad range of archeological resources with similar cultural patterns and components during a given time frame, thereby creating a regional chronology. Milliken et al.[38] provide a framework for interpreting the bay area and have divided the region's human history into four periods: the *Paleoindian Period* (13,500–10,000 years before present [BP]), the *Early Period* (10,000–2500 BP), the *Middle Period* (2500–900 BP), and the *Late Period* (900–400 BP). Economic patterns, stylistic aspects, and regional phases further subdivide cultural patterns into shorter phases. This scheme uses economic and technological types, sociopolitics, trade networks, population density, and variations of artifact types to differentiate between cultural periods.

Ethnohistoric Background

For a description of the traditional distribution and traditional cultural lifeways of the Ohlone Tribes who resided in San Francisco at the time Spanish colonists arrived in 1776, and their history after the time of colonization, see Topic E.5, Tribal Cultural Resources.

Historic Context

The project site was primarily within salt marsh and San Francisco Bay throughout the 19th century and early 20th century. Land reclamation efforts began in the 1880s with the construction of a levee along the bay margins and subsequent drying of the newly enclosed salt marsh for grazing and agriculture.[39]

In March 1927, the San Francisco Board of Supervisors opted to lease 150 acres from the Mills Estate to develop the City's future airport. The Mills Estate offered hundreds of acres of submerged land that airport engineers could later reclaim and develop immediately. On May 7, 1927, Mayor James Rolph dedicated the Mills Field Municipal Airport of San Francisco. SFO opened in June 1927, and for the next 10 years it conducted business from a terminal building that "was little more than a two-room wooden shack."[40]

By 1930, the City had purchased 1,100 acres of property from the Mills Estate, and the next year the airfield became known as the San Francisco Municipal Airport. Between 1934 and 1935, the Works Progress Administration put 2,000 people into work-relief programs to lengthen and widen the runways. Hundreds of

[37] Terra Engineers, Inc., *SFO SFGS Recovery Action Plan Project Geotechnical Sampling Services*, prepared for LSA Associates, Inc., September 2009.
[38] Milliken, Randall, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Tom Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottfield, Donna Gillette, Vaviana Bellifemine, Eric Strother, Robert Cartier, and David A. Fredrickson, "Punctuated Culture Change in the San Francisco Bay Area," in *Prehistoric California: Colonization, Culture, and Complexity*, T.L. Jones and K.A. Klar, editors, pp. 99–124, AltaMira Press, 2007.
[39] Airfield Development Engineering Consultant (ADEC), *Preliminary Report No. 1, Existing Data and Issues, Airfield Development Program, San Francisco International Airport*, prepared for San Francisco International Airport, 1999.
[40] Svanevik, Michael, "Other Times—The Never-ending Story of the SF Airport," *The Times* (San Mateo Newspaper), December 15, 1989, Section C, p. 3, quoted in David Chavez & Associates, *Cultural Resources Evaluation for the San Francisco International Airport Master Plan EIR, San Mateo County, California*, February 1991, pp. 15–19.

tons of dirt and rocks were carved from the nearby San Mateo hills. In all, about 319 acres of marsh and tidelands were filled.

During World War II, the U.S. Navy assumed control of SFO and filled another 100 acres of the adjacent bay. Airport facilities in general were modified to meet military requirements. Apron areas were enlarged and strengthened to accommodate multi-engine military jet and cargo aircraft. None of the original Mills Field buildings remain at SFO.

By the end of World War II, SFO had 700 acres in use with another 2,000 acres under development. By the end of the 1940s, the Old Bayshore Highway, which ran through Airport lands, was abandoned and a new Bayshore Freeway (now U.S. 101) was constructed farther to the west. The land on the west side of the freeway, designated as West of Bayshore, remains largely undeveloped.

Before 1939, the San Francisco Bay tidelands reached westward in the vicinity of the project site approximately to the present-day location of the Caltrain right-of-way. Since then, the tidal connection to the bay has been eliminated and the area has evolved into a mosaic of uplands and freshwater wetlands.

The project site and surrounding area have supported both cattle grazing and orchards. From the early 1950s to the early 1970s, approximately 30–50 head of cattle grazed portions of the project site and vicinity. Large portions of the property were disced each year during the spring months. A mass grading project was conducted by SFO in the late 1960s as part of a plan to develop commercial facilities associated with the Airport. SFO never completed this plan and the area that was filled now remains as open space.

Currently, the project site and vicinity remain primarily undeveloped open space. A high-voltage electrical transmission line operated and maintained by PG&E traverses the property. Belowground infrastructure and utilities include water mains, high-pressure natural gas lines, storm drainage facilities, sanitary sewer lines, and telecommunication lines.[41]

Historic Architecture

The project site is characterized primarily as open space that provides habitat and wetland areas for sensitive species such as the California red-legged frog and the San Francisco garter snake. Built features within the project site are associated with electrical power transmission and distribution. The only potential historic resource on the project site is Substation BA, which was initially constructed in 1972 and meets the 45-year minimum age threshold for consideration as a potential historic resource for the purposes of CEQA.

Substation BA

Substation BA is located at the north end of the project site. It covers an area of approximately 1 acre. The substation consists of a 1,750-square-foot substation building, an approximately 575-square-foot equipment building, transformers, and a switchyard surrounded by a chain-link security fence. The substation serves to regulate and distribute electrical power to the Airport from adjacent, medium-voltage distribution lines maintained by SFPUC.

[41] San Francisco Planning Department, *San Francisco Garter Snake Recovery Action Plan, West-of-Bayshore Property, San Francisco International Airport Preliminary Initial Study Mitigated Negative Declaration*, Case No. 2008.0498E, July 2008.

The substation building is located at the eastern edge of the substation yard. It is a 1,750-square-foot, one-story, rectangular-plan building, oriented north–south with a gable roof. It is constructed of irregular-face concrete blocks. The roof is covered with asphalt shingles. A single-leaf metal pedestrian door is located at the east corner of the north façade, and a larger, vehicular door enclosed with metal bi-fold panels is located at the north corner of the west façade. The gable ends and upper section of the east and west walls are filled with louvered vents to provide ample interior ventilation. There is no other fenestration.

The equipment shed is located at the north edge of the transformer yard. It is an approximately 575-square-foot, one-story, rectangular-plan building on a concrete slab foundation. The equipment shed is oriented north–south and capped with a gable roof with shallow eaves. The building and roof are clad in standing-seam metal siding. A single-leaf, metal door is located at the north corner of the east façade. There is no other fenestration.

Substation BA was constructed in 1972.[42] A comparison of historic aerial photographs indicates that the site has expanded and contracted several times since it was constructed. Site access was originally from the south via 1st Avenue in San Bruno. By 1982, a third building (no longer extant) was present and located immediately north of the original substation building. By 1987, access to Substation BA was similar to the current (2024) route. In 1997, the site was substantially altered.[43] At that time the substation building was expanded to its current footprint, nearly doubling its former size. All other buildings were removed from the site. The current equipment building was installed between 2002 and 2005. Based on this analysis, although Substation BA was initially constructed in 1972, its current configuration and assemblage of buildings and structures dates to 1997 or later. Therefore, Substation BA does not meet the minimum age requirement of 45 years and is not considered a potential historic resource for purposes of CEQA.

Archeological Resources

Records Search

A records search of the project site at the California Historical Resources Information System's Northwest Information Center (NWIC) at Sonoma State University, Rohnert Park, was conducted on December 22, 2022.[44] The NWIC maintains the official California Historical Resources Information System records of previous cultural resources studies and recorded cultural resources for the Area of Potential Effects and vicinity. The records search covered the project site and areas in the immediate vicinity. The records search included a review of previous studies, records, and maps on file at the NWIC, as well as the Built Environment Resource Directory for San Mateo County with summary information from the National Register, California State Landmarks, California Historic Points of Interest, Archaeological Determinations of Eligibility, and California Inventory of Historical Resources. The purpose of the records search was to (1) determine whether known cultural resources have previously been recorded within and in a 500-foot radius of the project site; and (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby cultural resources.

[42] Li, Michael, Environmental Planner, San Francisco International Airport, email to Eryn Brennan, Project Director, Environmental Science Associates, RE: 12 kV Data Needs, October 8, 2024.
[43] Li, Michael, Environmental Planner, San Francisco International Airport, email to Eryn Brennan, Project Director, Environmental Science Associates, RE: 12 kV Data Needs, October 8, 2024.
[44] California Historical Resources Information System, Northwest Information Center, File No. 22-0970 (confidential), December 22, 2022.

The results of the records search and additional background research indicate that more than 100 previous cultural resources studies have been conducted within 0.5 mile of the project site. Three studies included the project site and were completed for the 2008 San Francisco Garter Snake Recovery Action Plan (RAP)[45] and the 2019–2029 San Francisco Garter Snake RAP CEQA analysis.[46] No cultural resources were identified on the project site or the greater WOB property.

The records search identified one archaeological resource within 500 feet of the project site. This resource, a possible pre-contact archeological site consisting of a concentration of disturbed shell fragments, would not be affected by the project.

Sensitivity Assessment

A reconnaissance survey of the WOB property, including the project site, was conducted on January 13, 2023. Overall, the exposed surface of the WOB property is artificial fill, and based on the results of previous survey efforts, no pre-contact archeological resources were expected or identified. In addition, no historic-era archeological resources were identified.

Geologically, the project site contains artificial fill over Young Bay Mud. Based on existing geotechnical data for the WOB property, the project site is underlain by up to 8 feet of artificial fill. Young Bay Mud underlies the fill to an unknown depth. The existing geotechnical data for the project site do not extend below the Young Bay Mud; however, other geotechnical studies completed in the vicinity indicate that the depth of the Young Bay Mud varies but has been identified as up to 80 feet thick. The Young Bay Mud generally rests on the Upper Layered Sediments, a late Pleistocene sequence of alluvial, estuarine, and marine deposits. Where present, Upper Layered Sediments typically overlie and interfinger with Old Bay Clay, which rests on Lower Layered Sediments that lie unconformably on Franciscan bedrock.[47]

At some locations, the Upper Layered Sediments may represent the former exposed land surface in this area during the terminal Pleistocene, and therefore may have been potentially habitable in the late Pleistocene to early Holocene. Thus, beginning as early as 13,000 years ago, pre-contact settlement, where it occurred, may have resulted in the deposition of archeological materials atop the Upper Layer Sediments, which then would have been inundated and buried by Young Bay Mud as the bay filled and bay marshes formed. As a result, the interface between Young Bay Mud and the Upper Layered Sediments is potentially sensitive for containing submerged and buried archeological resources.

Proposed project construction would not include excavation or subsurface grading. Therefore, construction activities would not extend below the artificial fill and would not extend below the Young Bay Mud to the interface with the Upper Layered Sediments where there is archeological sensitivity. Accordingly, project activities have a low potential to encounter archeological materials associated with submerged and buried terrestrial landforms.

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[45] LSA Associates Inc., *Archaeological Review for the Recovery Action Plan for the San Francisco Garter Snake West-of-Bayshore Property, San Francisco International Airport*, prepared for Randall Dean, San Francisco Planning Department, July 2008; Terra Engineers, Inc., *SFO SFGS Recovery Action Plan Project Geotechnical Sampling Services*, prepared for LSA Associates, Inc., September 2009.

[46] Dudek, *Cultural Resources Inventory Report for the San Francisco Garter Snake Recovery Action Plan 2019 to 2029 at the West-of-Bayshore Property*, submitted to Sally Morgan, San Francisco Planning Department, prepared for San Francisco International Airport, August 2020.

[47] Airfield Development Engineering Consultant (ADEC), *Preliminary Report No. 1, Existing Data and Issues, Airfield Development Program, San Francisco International Airport*, prepared for San Francisco International Airport, 1999.

Approach to Analysis

Architectural Resources

Potential impacts on historic resources are assessed by identifying any activities (during either construction or operation) that could affect resources identified as historic resources for the purposes of CEQA. Once a resource has been identified, it must be determined whether the project would "cause a substantial adverse change in the significance" of the resource. Therefore, in accordance with CEQA Guidelines section 15064.5(b)(2), the following analysis considers the potential for the proposed project to materially impair the significance of a historic resource by causing direct or indirect changes to the physical characteristics of the resource that convey its historic significance. Mitigation measures for impacts on historic resources may involve avoidance of the resource; revision of a project to minimize the impact; or, where avoidance or minimization is not feasible, documentation of the resource. However, as noted previously, documentation may not reduce impacts on a historic resource to a less-than-significant level.

Archeological Resources

Archeological resources can include *historic resources*—that is, resources that are considered significant because they meet one or more of the eligibility criteria of the California Register, as well as unique *archeological resources*, as defined in CEQA section 21083.2(g). The significance of Native American and historic archeological sites is most commonly derived from the information potential contained within the site (under National Register Criterion D/California Register Criterion 4). However, archeological resources can also be considered an important example of a type (criterion C/3) or associated with an important person (criterion B/2) or event (criterion A/1).

Impacts on unique archeological resources or archeological resources that qualify as historic resources are assessed pursuant to CEQA section 21083.2, which states that the lead agency shall determine whether the project may have a significant effect on archeological resources. The lead agency must determine whether the project would cause a substantial adverse change in the significance of the resource. A *substantial adverse change* is one that could result in the alteration of a resource or, in some cases, of its physical setting; physical destruction or disturbance of all or part of an archeological deposit; or removal of materials that results in a loss of information.

Human Remains

Human remains, including those buried outside of formal cemeteries, are protected under several state laws, including Public Resources Code sections 5097.98 and 5097.99 and Health and Safety Code section 7050.5. These laws are discussed under Regulatory Framework, p. 47. Potentially significant impacts on human remains may include disturbance, destruction, or removal of interred human remains.

Impact CR-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code. ***(No Impact)***

One potential historic architectural resource is located within the project site: Substation BA. However, a review of historical aerial photographs and information provided by SFO indicates that Substation BA was substantially expanded in 1997. This expansion included reconstruction of the substation building to its

current size and configuration. All other buildings associated with the substation were installed after 1997. Because the current appearance and configuration of Substation BA date to 1997, the substation does not meet the minimum age requirements for consideration as a potential historic resource. No historic architectural resources are present; therefore, ***no impact*** would occur.

Impact CR-2: The proposed project would not cause a substantial adverse change in the significance of an archeological resource pursuant to CEQA Guidelines section 15064.5. ***(Less than Significant)***

This section discusses archeological resources as both historic resources according to CEQA Guidelines section 15064.5 and unique archeological resources as defined in CEQA section 21083.2(g). A significant impact would occur if implementation of the proposed project would cause a substantial adverse change to an archeological resource through physical demolition, destruction, relocation, or alteration of the resource.

Research suggests that the potential for implementation of the proposed project to affect archeological resources is low. Proposed project construction would include vegetation clearing and laying gravel for roads and access pads, but otherwise does not include excavation or subsurface grading that could affect subsurface archaeological resources. In the unlikely event a suspected archeological resource is discovered during proposed project construction, SFO's Airport Standard Construction Measures (ASCMs) Division 01 35 91 requires the contractor to suspend work and promptly report all subsurface archaeological finds to the City, and specifies procedures to be followed to protect the resource, ensure that it is assessed by an archeologist, and provide appropriate treatment of significant archeological resources.[48] Therefore, impacts on archeological resources would be ***less than significant***.

Impact CR-3: The proposed project would not disturb human remains, including those interred outside of formal cemeteries. ***(Less than Significant)***

CEQA Guidelines section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. No known human remains, including those interred outside of dedicated cemeteries, are located in the immediate vicinity of the project site. Though unlikely, ground disturbance during implementation of the proposed project could uncover or affect previously undiscovered human remains, either in the context of an archeological site or in isolation.

Should construction activities within the project site disturb human remains, any inadvertent damage to the remains would be considered a significant impact. The proposed project would be subject to the provisions of California Health and Safety Code section 7050.5 with respect to the discovery of human remains. Public Resources Code section 5097.98 regulates the treatment and disposition of Native American human remains encountered during construction. Furthermore, SFO's ASCMs Division 01 35 91 outlines work stoppage and agency notification protocols to follow in the event potential resources are encountered during construction.

Compliance with state regulatory requirements would ensure that any human remains uncovered during construction would be promptly identified and appropriately protected and treated, and thus would minimize the potential for significant impacts on human remains or other funerary objects. Therefore,

[48] San Francisco International Airport, Airport Standard Construction Measures, Division 01 – General Requirements: Archaeological (01 35 91).

impacts from the proposed project on previously unknown human remains that could occur with implementation of the proposed project would be ***less than significant***.

Impact C-CR-1: The proposed project in combination with cumulative projects would not result in cumulative impacts on architectural resources. ***(No Impact)***

The geographic context for the analysis of potential cumulative impacts related to historic architectural resources consists of development and infrastructure projects located on the project site. Those projects are listed in Table 7, p. 24, and mapped on Figure 11, p. 23. There are no architectural resources associated with the proposed project or with any cumulative project listed in Table 7; therefore, the proposed project would not combine with cumulative projects to result in a significant cumulative impact. As such, there would be ***no impact*** on architectural resources.

Impact C-CR-2: The proposed project in combination with cumulative projects would not result in significant cumulative impacts on archeological resources and human remains. ***(Less than Significant)***

The geographic context for the analysis of potential cumulative impacts related to archeological resources and human remains consists of the development and infrastructure projects located on the project site. Those projects are listed in Table 7, p. 23, and mapped in Figure 11, p. 26.

Federal and state laws protect cultural resources in most cases, by requiring either a project redesign to ensure preservation of the resource, or the archeological recovery of a sample of the significant data represented by the archeological resource.

As discussed under Impact CR-2 and Impact CR-3, the potential for encountering archeological resources or human remains on the project site is low. However, should a find occur, impacts would be significant if not mitigated. Other cumulative projects on the WOB property would result in ground disturbance and thus could affect the same archeological resources the project, should any such resource be identified. Therefore, the proposed project could combine with cumulative projects to result in a significant cumulative impact. However, compliance with SFO's ASCMs Division 01 35 91 and existing regulatory requirements would reduce the potential for impacts on as-yet-undiscovered resources to a less-than-significant level. Therefore, the project's contribution to a potentially significant cumulative impact would not be considerable and the impact would be ***less than significant***.

E.5 Tribal Cultural Resources

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
5. TRIBAL CULTURAL RESOURCES. Would the project:					
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐	☐

Regulatory Framework

Assembly Bill 52, Native Americans: California Environmental Quality Act, enacted in 2015, defines tribal cultural resources. Assembly Bill 52 requires that CEQA lead agencies provide California Native American tribal representatives the opportunity to provide input on the presence of tribal cultural resources within a project area, and on the potential for projects to result in impacts on tribal cultural resources. This is accomplished through a requirement to provide notice of such projects early in the planning process to Tribes that have indicated that they wish to be notified; to consult with Tribes requesting consultation, and if potential impacts on tribal cultural resources are identified through consultation, to further consult on appropriate mitigation of those impacts; and to incorporate feasible mitigation in projects for which impacts were identified.

Ethnohistoric Background

At the time of the arrival of Europeans in central California in the 18th century, Ohlone Native Americans occupied an extensive territory that encompassed the San Francisco Peninsula, extended southward to Big Sur and San Juan Bautista, and included inland areas along both sides of the Carquinez Strait. The territory

also extended eastward beyond the East Bay hills to present-day Walnut Creek and Livermore.[49] The Ohlone were speakers of the Penutian language (also referred to as "Costanoan" or "Ohlone"), which comprised six languages or dialect clusters: Karkin, Mutsun, Awaswas, Rumsen, Chalon, and San Francisco Bay Costanoan, which comprised three dialects—Ramaytush, Tamien, and Chochenyo—each the primary dialect of Ohlone peoples in different geographic areas of the bay region.[50]

As determined on the basis of linguistic studies, the greater San Francisco Peninsula, including the area now occupied by San Francisco and most of San Mateo County, was home to the *Ramaytush* Ohlone Tribe. Today, there are no known living descendants of the *Yelamu* Ohlone, who once occupied the land now known as the city and county of San Francisco and northern San Mateo County. Until recently, anthropologists believed that the last known descendant of a native of the San Francisco Peninsula had died in the 1920s. However, the Association of Ramaytush Ohlone includes families who descended from an *Aramai Ramaytush* Ohlone individual, whose origin was a village in Pacifica. Geographically, these families are the closest known Ohlone descendants to the native bands of San Francisco and the only known living descendants of the *Ramaytush* Ohlone peoples.[51]

Approach to Analysis

In 2015, the planning department notified Ohlone Tribes and individuals then listed by the Native American Heritage Commission about the requirements described above. The department invited consultation on tribal cultural resources on lands for which San Francisco is the lead CEQA agency and consulted with Ohlone groups and individuals who responded to that outreach. The parties to that consultation agreed that all archeological resources of Native American origin would be presumed to be tribal cultural resources. They also agreed that the preferred mitigation of impacts on Native American archeological resources is preservation in place of the resource. Should preservation not be feasible, mitigation would include archeological data recovery and public interpretation, in consultation with and participation by tribal representatives, of the tribal values represented by the resource. The planning department includes these measures in all projects for which analysis identifies the potential for impacts on Native American archeological resources, regardless of whether Tribes request project-specific consultation, and they are implemented upon the discovery of a Native American archeological resource.

More recently, in tribal consultation on two large programmatic projects in San Francisco, Tribes have indicated that they place particular traditional cultural value on the San Francisco Bay shoreline and creek network. They view the shoreline and creek network both as the focus of many traditional tribal subsistence activities and other activities and as representative of the tribal relationship with the land and the water as both beneficiaries and resource stewards. Tribes indicated that access to the shoreline and creeks and maintenance and enhancement of native vegetation are culturally valued. The cultural values represented by Native American archeological deposits may differ from or include more than their archeological information potential.

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[49] Levy, R., "Costanoan" in *California, Handbook of the Indians of North America*, Vol. 8, R. Heizer, ed. Smithsonian Institution, Washington, D.C, 1978, p. 506.
[50] Golla, Victor, California Indian Languages. University of California Press. Berkeley, 2011.
[51] Milliken, R., L. Shoup and B. Ortiz. *Ohlone/Costanoan Indians of the San Francisco Peninsula and Their Neighbors, Yesterday and Today*, Prepared by Archaeological/Historical Consultants for National Park Service, Golden Gate National Recreation Area, San Francisco, California, 2009, p. 2; Milliken, Randall, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Tom Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottfield, Donna Gillette, Vaviana Bellifemine, Eric Strother, Robert Cartier, and David A. Fredrickson, "Punctuated Culture Change in the San Francisco Bay Area," in *Prehistoric California: Colonization, Culture, and Complexity*, T.L. Jones and K.A. Klar, editors, pp. 99–124, AltaMira Press, 2007.

Pursuant to CEQA section 21080.3.1(d), within 14 days of a determination that an application for a project is complete or a decision by a public agency to undertake a project, the CEQA lead agency is required to contact the Native American Tribes that are culturally or traditionally affiliated with the geographic area in which the project is located. The notified Tribes have 30 days to request consultation with the lead agency to discuss potential impacts on tribal cultural resources. On November 19, 2024, the planning department contacted Native American tribal representatives and Ohlone interested parties for the San Francisco area, providing a description of the proposed project and requesting comments on the identification, presence, and significance of tribal cultural resources in the project vicinity. During the 30-day comment period, no Native American tribal representatives or Ohlone interested parties contacted the planning department to request consultation for the current project. Nonetheless, as agreed to in prior planning department consultation, the department presumes all Native American archeological resources on projects for which the City is the CEQA lead agency to be tribal cultural resources. The results of this prior consultation are applicable to the proposed project, as discussed below.

Impact TCR-1: The proposed project could result in a substantial adverse change in the significance of a tribal cultural resource, as defined in Public Resources Code section 21074. ***(Less than Significant)***

CEQA section 21074 requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in section 21074, *tribal cultural resources* are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing, on the national, state, or local register of historical resources.

As discussed previously, based on prior tribal consultation for San Francisco lands undertaken by the planning department in 2015, all Native American archeological resources are presumed to be potential tribal cultural resources. As discussed under Topic E.4, Cultural Resources, ground-disturbing activities for the proposed project have a low potential to affect archeological resources. However, if such resources are present within the project site, project construction could damage these deposits, resulting in a loss of significant information, and could affect the tribal cultural values represented by the resource. A tribal cultural resource is adversely affected when a project causes a substantial adverse change in the resource's significance. For archeological sites that are tribal cultural resources, destruction of or physical damage to a resource through pile or other deep foundation construction would constitute a substantial adverse change, which would be a significant impact on tribal cultural resources.

As discussed under Impact CR-2, though unlikely, the potential exists for the discovery of and impacts on pre-contact archeological resources, which, as discussed previously, would be presumed to be tribal cultural resources. Therefore, implementation of the proposed project has the potential to result in substantial adverse changes to tribal cultural resources to the same extent that it would affect unidentified pre-contact archeological resources. As discussed under Impact CR-2, SFO's ASCMs Division 01 35 91 sets forth procedures for the identification, protection, and treatment of archeological resources, including Native American pre-contact archeological resources. Therefore, impacts on tribal cultural resources would be ***less than significant***.

Impact C-TCR-1: The proposed project in combination with cumulative projects could result in a significant cumulative impact on tribal cultural resources. ***(Less than Significant)***

The geographic context for the analysis of potential cumulative impacts on tribal cultural resources consists of the development and infrastructure projects located on the project site. Those projects are listed in Table 7, p. 23, and mapped on Figure 11, p. 26.

State laws protect tribal cultural resources in most cases, either through project redesign to ensure that the resource is preserved in place, or through mitigation efforts designed through consultation with the culturally affiliated Native American Tribe(s).

As discussed under Impact TCR-1, there are no known tribal cultural resources on the project site, although the potential exists for the presence of undiscovered pre-contact archeological resources that may also be determined to be tribal cultural resources. There are cumulative projects that could affect the same tribal cultural resources if any are identified. Therefore, subsequent projects that could occur with implementation of the proposed project could combine with cumulative projects to result in a significant cumulative impact. However, the proposed project would include implementation of SFO's ASCMs Division 01 35 91, which includes procedures for the identification, protection, and treatment of archeological resources, including Native American pre-contact archeological resources. Therefore, implementation of the proposed project in combination with cumulative projects would not result in a cumulatively considerable contribution to a significant cumulative impact and the cumulative impact would be ***less than significant***.

E.6 Transportation and Circulation

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
6. TRANSPORTATION AND CIRCULATION. Would the project:					
a) Involve construction that would require a substantially extended duration or intensive activity, the effects of which would create potentially hazardous conditions for people walking, bicycling, or driving, or public transit operations; or interfere with emergency access or accessibility for people walking or bicycling; or substantially delay public transit?	☐	☐	☒	☐	☐
b) Create potentially hazardous conditions for people walking, bicycling, or driving or public transit operations?	☐	☐	☒	☐	☐
c) Interfere with accessibility of people walking or bicycling to and from the project site, and adjoining areas, or result in inadequate emergency access?	☐	☐	☒	☐	☐

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
d) Substantially delay public transit?	☐	☐	☒	☐	☐
e) Cause substantial additional vehicle miles traveled or substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow travel lanes) or by adding new roadways to the network?	☐	☐	☒	☐	☐
f) Result in a loading deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving; or substantially delay public transit?	☐	☐	☒	☐	☐
g) Result in a substantial vehicular parking deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving; or interfere with accessibility for people walking or bicycling or inadequate access for emergency vehicles; or substantially delay public transit?	☐	☐	☒	☐	☐

This section evaluates the potential impacts of the proposed project on transportation and circulation. The analysis was conducted in accordance with the planning department's *Transportation Impact Analysis Guidelines for Environmental Review* (SF Transportation Guidelines),[52] which were updated in October 2019.

Environmental Setting

Roadways

7th Avenue is designated as a local, single-lane roadway, oriented in the north–south direction. 7th Avenue is located north of the project site and becomes Shaw Road after its intersection with Interstate 380 to the north.

Angus Avenue is a local, single-lane roadway with a posted speed limit of 25 miles per hour. It is oriented in the east–west direction and becomes West Angus Avenue, a major collector roadway, north of the project site.

1st Avenue is designated as a local, single-lane roadway oriented in the north–south direction. 1st Avenue extends north of the project site where it intersects San Mateo Avenue.

U.S. Highway 101 is a north–south highway that traverses California, Oregon, and Washington and runs for approximately 1,500 miles along the Pacific Ocean. It is located directly adjacent to the east of the project site.

[52] San Francisco Planning Department, *Transportation Impact Guidelines for Environmental Review*, October 2019, https://sfplanning.org/project/transportation-impact-analysis-guidelines-environmental-review-update#impact-analysis-guidelines, accessed September 30, 2024.

State Route 82 (also known as El Camino Real) is a California state highway that runs from Interstate 880 in San Jose to Interstate 280 in San Francisco following the San Francisco Peninsula. State Route 82 runs directly adjacent to the west of the project site.

North McDonnell Road is designated as a minor arterial with one lane in each direction and the posted speed limit ranges from 35 to 40 miles per hour. It has a north–south orientation and becomes South McDonnell Road to the south of the intersection with South Link Road.

Bicycle Facilities

Access to the project site is restricted to SFO, public utility, entities with access agreements with SFO, and law enforcement staff as an "Environmentally Sensitive Area" and for the security of critical infrastructure on site. No bicycle routes provide access directly to the WOB property. The nearest bikeway facilities in the site vicinity are Class II bike lanes located along North McDonnell Road as well as San Antonio Avenue to the east and west of the site, respectively.

Pedestrian Facilities

As described above, access to the project site in general is restricted to SFO, public utility, entities with access agreements with SFO, and law enforcement staff. All pedestrian access to the WOB property during construction would be coordinated with SFO staff. Pedestrian facilities are provided in the project vicinity along 1st, 2nd, 3rd, 4th, 5th, 7th, and Angus avenues, as well as Huntington and San Antonio avenues. There are additional sidewalk facilities along many of the residential streets surrounding the project site to the north, west, and south.

Transit

The project site is located east of the cities of San Bruno and Millbrae and is served by both local and regional transit services. Primary public transit access is provided to the Airport adjacent to the WOB property by Bay Area Rapid Transit (BART). Specifically, the Yellow Line from Antioch to SFO and the Red Line from Richmond to Millbrae provide service approximately every 10 and 20 minutes, respectively, to the SFO BART station near the project site. Additionally, the Monterey Airbus, also known as Groome Transportation, provides shuttle services between Monterey, Marina, Prunedale, Morgan Hill, San Jose, and the Airport. San Mateo County Transit (SamTrans) Routes 397 and 292 provide bus service to the Airport from downtown San Francisco to San Mateo and Palo Alto approximately every half hour. The project site is also located adjacent to the Caltrain rail line and accessible from the San Bruno Caltrain station with daily service from San Francisco to San Jose approximately every half hour.

Emergency Access

The project site is accessible through existing gates on the WOB property and the West Field Checkpoint on the Airport area east of U.S. 101. Manhole PD-B504 would be accessed through a new access gate within an existing fence owned by Caltrans off an existing service road adjacent to U.S. 101. Access to the WOB property in general is restricted to SFO, public utility, entities with access agreements with SFO, fire protection, and law enforcement staff. The San Francisco Fire Department (fire department) Airport Division is responsible for providing fire protection, emergency medical services, and hazardous materials abatement for the Airport. The San Francisco Police Department (police department) Airport Bureau provides law enforcement and emergency services at the Airport.

Approach to Analysis

Significance Criteria

The criteria for determining the significance of impacts for the proposed project are consistent with the environmental checklist in Appendix G of the CEQA Guidelines, as modified by the planning department in the 2019 SF Transportation Guidelines, which separates the significance criteria into construction and operation.

Construction of the proposed project would have a significant effect on the environment if it would require a substantially extended duration or intense activity, and the effects would create potentially hazardous conditions for people walking, bicycling, or driving, or public transit operations; or would interfere with accessibility for people walking or bicycling or substantially delay public transit.

Operation of the proposed project would have a significant effect if it would do any of the following:

- Create potentially hazardous conditions for people walking, bicycling, or driving or public transit operations.
- Interfere with the accessibility of people walking or bicycling to and from the project site, and adjoining areas, or result in inadequate emergency access.
- Substantially delay public transit.
- Cause substantial additional vehicle miles traveled (VMT) or substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow travel lanes) or by adding new roadways to the network.
- Result in a loading deficit, and the secondary effects would create potentially hazardous conditions for people walking, bicycling, or driving or substantially delay public transit.
- Result in a substantial vehicular parking deficit, and the secondary effects would create potentially hazardous conditions for people walking, bicycling, or driving; interfere with accessibility for people walking or bicycling or inadequate access for emergency vehicles; or substantially delay public transit.

Construction Travel Demand Associated with the Proposed Project

Project travel demand refers to the number, type, and common destinations of new trips that people would take to and from the project site. Travel demand for construction of the proposed project was based on preliminary construction information provided by SFO and the modeling assumptions used for the air quality analysis, including maximum daily and total numbers of trucks and workers by work phase.[53] Project-generated trips consist of trips by construction workers to and from the project site and hauling and vendor truck trips to transport gravel, construction materials, and removed cables. **Table 8** shows estimates of the proposed project's maximum daily vehicle trips by phase. Truck trips would occur intermittently during the day (Monday through Friday, 7 a.m. to 5 p.m.); worker trips are assumed to occur at the beginning and end of the workday during the a.m. and p.m. peak hours.

[53] Environmental Science Associates, *Air Quality Analysis Methods 12 kV Power Distribution Replacement Project (Case No. 2024-005910ENV)*, October 28, 2024.

Table 8 Maximum Daily Vehicle Trip Estimates by Phase

Construction Phase	Duration (workdays)	Truck Trips (one-way trips/day)	Worker Vehicle Trips (one-way trips/day)	Total Trips (one-way trips/day)
Site Preparation and Vegetation Removal	31	10	16	26
Access Road Installation	81	18	52	70
Access Pad Installation	31	18	52	70
First Circuit Cable Removal and Installation	121	8	36	44
Second Circuit Cable Removal and Installation	121	8	36	44

SOURCES: Data provided by SFO and compiled by Environmental Science Associates in 2024.

NOTES: Truck trips include haul and vendor trips.

Construction Staging for the Proposed Project

Because of the site sensitivity of the WOB property, no construction staging would occur onsite except on the proposed access pads. The construction contractor would provide offsite construction staging areas or, if available at the time of construction, construction staging activities could occur on areas of Airport property near the project site, including the Aviador Lot. The Aviador Lot is located on Airport property west of U.S. 101 in the City of Millbrae. Truck access into and out of the existing Aviador Lot construction staging area via Aviador Avenue (which has one travel lane in each direction) is right-turn-in, left-turn-out for trucks using Garden Lane for access and left-turn-in, right-turn-out for trucks using the northern parking lot access route. For dewatering of the cable vault at Substation BA, water tanks would be staged on the existing access road to the substation.

Summary of Construction Activities and SFO's ASCMs Considered in the Analysis

In compliance with SFO's ASCMs Division 01 35 43.01, Demolition, and Division 01 55 26, Traffic Regulation,[54] SFO or its contractors would prepare and implement a traffic control plan that conforms to the *California Manual of Uniform Traffic Control Devices* and is consistent with SFO traffic regulations and the policies of the police department's Airport Bureau.[55] The traffic control plan would include the following elements, as appropriate:

- Circulation and detour routes.
- Advance warning signage.
- Construction truck routes.
- Maintenance of pedestrian and bicycle access and circulation.
- Vehicle, pedestrian, or bicycle detour routes; designation of sufficient staging areas.

[54] San Francisco International Airport, *SFO Memorandum: Airport Standard Construction Measures Implementation in Construction*, March 2020.
[55] California Department of Transportation, *2014 California Manual of Uniform Traffic Control Devices, Revision 8*, January 2024, Chapter 6C, Temporary Traffic Control Elements, https://dot.ca.gov/programs/safety-programs/camutcd, accessed October 6, 2024.

- Scheduling and monitoring of construction vehicle movement.
- Coordination with public service providers such as transit, fire, police, schools, and hospitals.

The traffic control plan would serve to inform federal, state, and City agencies of construction of the proposed project and minimize temporary transportation effects in the vicinity of the construction area. In addition, as appropriate, Caltrans encroachment permits would be obtained where construction activities would occur within the Caltrans right-of-way.

Impact Analysis

Impact TR-1: The proposed project would not involve construction that would require a substantially extended duration or intensive activity, the effects of which would create potentially hazardous conditions for people walking, bicycling, or driving, or public transit operations; or interfere with emergency access or accessibility for people walking or bicycling; or substantially delay public transit. ***(Less than Significant)***

Construction of the proposed project would take place over a period of approximately 36 months and would include site preparation and vegetation removal, access road installation, access pad installation, cable removal and installation for the first circuit, and cable removal and installation for the second circuit.

Construction activities would adhere to a traffic control plan in coordination with Caltrans and a construction safety plan to minimize interference with existing roadway activity. Additionally, because of the site sensitivity of the WOB property, no construction staging would occur onsite except on the proposed access pads. The construction contractor would provide offsite construction staging areas away from areas of high pedestrian, bicycle, vehicle, or transit traffic. Furthermore, construction activities would include a maximum of 26 workers onsite at one time, which would result in a maximum of 52 daily vehicle trips to and from the site, as well as 18 daily truck trips as shown in Table 8, p. 64. This level of traffic would be temporary and would not result in hazardous conditions for roadway users in the vicinity regardless of where staging would occur, either at the Aviador Lot or elsewhere in the project vicinity.

Construction activities would be conducted in accordance with SFO's ASCMs Division 01 35 43.01, Demolition, and Division 01 55 26, Traffic Regulation. Compliance with these measures would require preparing and implementing a traffic control plan, ensuring that such activities would not result in potentially hazardous conditions for people walking, bicycling, or driving, or for public transit operations; would not interfere with emergency access or accessibility for people walking or bicycling; and would not substantially delay public transit. Therefore, construction-related impacts of the proposed project would be ***less than significant***, and no mitigation measures would be required.

Impact TR-2: Operation of the proposed project would not result in significant transportation impacts. ***(Less than Significant)***

The proposed project would not increase operational activity relative to existing conditions. SFO would be responsible for the continued operation and maintenance of the new electrical infrastructure. Routine inspections would include visual and electrical testing of cables and splices every two years. Testing would require dewatering manholes before access. Light-duty vehicles would also be used to carry testing equipment.

Emergency access and repairs would occur as needed, although fewer repairs would be anticipated than under existing conditions as a result of full cable replacement. The proposed project would not generate any new employees; operation and maintenance would be performed by existing SFO staff.

The project site is gated and would not be directly accessible by pedestrians, bicyclists, or transit vehicles. The proposed access road widening and access road construction would facilitate future maintenance-related and emergency access to the site and improve conditions for vehicles accessing the site. General traffic congestion in the project vicinity during operation and maintenance would not result in substantial delays to emergency vehicle response. The proposed project would not affect pedestrian and bicycle access, as access would be restricted to authorized staff. The project also would not directly change facilities for public transit routes surrounding the project site, including BART or SamTrans, nor would it add driveways to streets with transit. No direct public transit service to the project site would be necessary, and the proposed project would not generate any new employees. No additional parking spaces would be necessary for the proposed project, as vehicle access to the project site would be restricted to those authorized to enter. Therefore, no potentially hazardous conditions would occur for people walking, bicycling, or driving.

The California Governor's Office of Planning and Research's statewide guidance is not applicable to the analysis of new underground cables and associated infrastructure for the proposed project. Those actions would not be considered land use or transportation projects, nor would they generate a substantial increase in long-term VMT (i.e., VMT generated by the proposed project would be primarily temporary, construction-related VMT). The proposed project would not require any new employees, as operation and maintenance would be performed by existing SFO staff, which would maintain existing levels of vehicle traffic to and from the site. Additionally, the proposed widening of existing access roads and construction of new access roads would not induce additional travel by increasing roadway capacity. No operational vehicle travel would change as a result of project implementation.

For these reasons, operation of the proposed project would not result in potentially hazardous conditions for people walking, bicycling, or driving, or public transit operations; interfere with accessibility for people walking or bicycling, or result in inadequate emergency access; result in substantial transit delay; cause substantial additional VMT or substantially induce additional automobile travel; result in a loading deficit; or result in a substantial vehicular parking deficit. Therefore, this impact would be ***less than significant***.

Impact C-TR-1: Construction of the proposed project in combination with cumulative projects would not result in a significant cumulative impact on transportation and circulation. ***(Less than Significant)***

The geographic context for the analysis of potential cumulative impacts related to transportation and circulation consists of the conservation, development, and infrastructure projects generally located on and within 0.25 mile of the project site. Those projects are listed in Table 7, p. 23, and mapped on Figure 11, p. 26.

As shown in Figure 11, p. 26, 10 projects are located within the geographic context for the analysis of potential cumulative impacts. Like the proposed project, cumulative projects on SFO property would be required to comply with SFO's ASCMs. They also would be required to coordinate with Caltrans and local jurisdictions, as appropriate, to coordinate any temporary closures of sidewalks, bicycle routes, and travel lanes, and to develop traffic control plans that would address construction-related vehicle routing, traffic control, and pedestrian and bicyclist movements adjacent to the construction area for the duration of the

construction overlap. SFO's ASCMs require contractors to coordinate with SFO's Airport Operations division. Thus, the traffic control plans for the SFO projects would be coordinated, similar to the ongoing coordination activities for the multiple concurrent construction projects occurring at the Airport. Additionally, the 160 El Camino Real cumulative project in San Bruno would require a Caltrans encroachment permit which would require the preparation of a traffic control plan as part of the Caltrans permitting process.[56] The traffic control plans would help maintain the safety of public streets for people walking, bicycling, or driving, or for public transit operations.

Given the limited number of cumulative projects in the immediate vicinity that could overlap with construction of the proposed project, and the implementation of traffic control plans required for SFO projects, the cumulative construction-related transportation impacts of the proposed project, in combination with the cumulative projects, would be ***less than significant***.

Impact C-TR-2: Operation of the proposed project in combination with cumulative projects would not result in a significant cumulative impact related to transportation and circulation. ***(Less than Significant)***

Operation of the proposed project and cumulative projects could result in a significant cumulative transportation impact if combined activities would result in potentially hazardous conditions or interfere with access for pedestrians, bicyclists, motorists, transit operations, and emergency vehicles. Regular inspection and maintenance activities for the replaced electrical infrastructure would occur on SFO property that has restricted access, and any vehicle trips associated with this work would be minimal. Given the limited access points for the WOB property, the frequency of inspection and maintenance activities, and the distance between the project site and the other cumulative projects, it is unlikely that operational vehicle trips would overlap. Thus, no significant cumulative operational transportation impacts would occur, and cumulative transportation impacts would be ***less than significant***.

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[56] City of San Bruno, Planning Commission Staff Report, Agenda Item No. 4.D, 160 El Camino Real, May 18, 2021.

E.7 Noise and Vibration

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
7. NOISE. 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, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☒	☐	☐

Environmental Setting

Noise Definitions and Concepts

Sound is mechanical energy transmitted by pressure waves through a medium such as air. *Noise* can be defined as unwanted sound. Sound is characterized by various parameters that include 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* has become the most common descriptor used to characterize the loudness of an ambient sound level. Sound pressure level is measured in decibels (dB), with 0 dB corresponding roughly to the threshold of human hearing and 120–140 dB corresponding to the threshold of pain.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. Therefore, when assessing potential noise impacts, sound is measured using an electronic filter that deemphasizes the frequencies in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies, instead focusing on the frequency mid-range. This method of frequency weighting is referred to as *A-weighting* and is expressed in units of A-weighted decibels (dBA). All sound pressure levels and sound power levels reported below are A-weighted.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Several different methods are used to quantify vibration.

Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal and is typically expressed in units of inches per second. The PPV is most frequently used to describe vibration impacts on buildings. The *root mean square amplitude* is most frequently used to describe the effect of vibration on the human body. The root mean square amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (vibration decibels [VdB]) is commonly used to measure root mean square amplitude. The decibel notation acts to compress the range of numbers required to describe vibration.[57] Typically, groundborne vibration generated by human activity attenuates rapidly with distance from the source of the vibration.

Existing Noise in the Project Vicinity

The primary noise sources on and near the project site consist of aircraft operations, vehicle traffic on U.S. 101, and Caltrain and BART railways. The study area for potential noise and vibration impacts is 900 feet from the project site.[58] Three short-term (15-minute) ambient noise measurements were taken at the project site locations nearest to noise-sensitive receptors to establish the existing ambient noise levels in the project area. These measurements were taken on Wednesday, September 18, 2024, to establish existing daytime noise levels at residential receptors on 7th Avenue and at Belle Air Elementary School, adjacent to residential receptors on Huntington Avenue, and adjacent to residential receptors on San Antonio Avenue. These receptors are located 170 feet, 210 feet, and 300 feet from work areas, respectively. The sound level surveys were conducted using Larson Davis Model LxT2 sound level meters which were calibrated prior to use and operated according to the manufacturer's specifications.

Existing Vibration in the Project Vicinity

The primary vibration sources in the vicinity of the project site are Caltrain and BART trains that travel on elevated train tracks at the southern end of the site and are grounded on the west end of the site adjacent to Huntington Avenue and San Antonio Avenue. The Federal Transit Administration (FTA) has published generalized ground-surface vibration levels for light-rail passenger trains, which are presented in **Table 9**; the table presents only those vibration levels that correspond to light rail speeds that are representative of those that occur along the southern and western ends of the project site.

The noise measurement locations are shown in **Figure 16**, and **Table 10** summarizes the results of the noise measurement survey.

[57] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed September 17, 2024.

[58] This distance accounts for typical construction noise levels that can affect a sensitive receptor if there is a direct line of sight between a noise source and a sensitive receptor (i.e., a piece of equipment generating 85 dBA would attenuate to 60 dBA over a distance of 900 feet). An exterior noise level of 60 dBA will typically attenuate to an interior noise level of 35 dBA with the windows closed and 45 dBA with the windows open.

Table 9 Generalized Vibration Levels (in VdB) from Light Rail Activity

Train Speed	Distance from Tracks 50 Feet	100 Feet
10 Miles per Hour	59 VdB	53 VdB
20 Miles per Hour	65 VdB	59 VdB
30 Miles per Hour	69 VdB	63 VdB

ABBREVIATION: VdB = vibration decibels

SOURCE: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed September 17, 2024.

Table 10 Existing Noise Environment in the Project Vicinity

	Location	Date and Time Period	L_{eq} dB	Noise Sources
Short-Term Measurements (15 minutes)				
ST-1	Northwestern border of the project area, adjacent to 7th Avenue residences and Belle Air Elementary School	9/18/24 10:30 to 10:45 a.m.	49.2[a]	Bird vocalization, distant traffic noise from U.S. 101, and occasional dog barking
ST-2	Western border of the project area, adjacent to Huntington Avenue residences	9/18/24 11:06 to 11:21 a.m.	61.2	Caltrain and BART rail passage, aircraft take off at SFO
ST-3	Southwestern border of the project area, adjacent to San Antonio Avenue residences	9/18/24 11:28 to 11:43 a.m.	72.2	Caltrain and BART rail passage, aircraft take off at SFO

ABBREVIATIONS: BART = Bay Area Rapid Transit; dB = decibels; L_{eq} = equivalent continuous sound level representing the average sound level over a period of time; SFO = San Francisco International Airport; ST = short term; U.S. 101 = U.S. Highway 101

NOTE:

a. Aircraft takeoffs at SFO were not captured during time of measurement.

Existing Sensitive Receptors

Some land uses are more sensitive to noise levels than others given the types of activities typically associated with the uses. Residences, hotels, schools, senior care facilities, and hospitals are generally more sensitive to noise than commercial and industrial land uses. There are no existing hospitals or skilled nursing facilities within 900 feet of the project site. Residences along 7th Avenue that are located adjacent to the northwestern border of the project area (ST-1 in Figure 16) are the nearest residential receptors in the project vicinity. Belle Air Elementary School is adjacent to this location. Huntington Avenue residences are adjacent to the western border of the project area (ST-2 in Figure 16), and San Antonio Avenue residences are adjacent to the project area's southwestern boundary (ST-3 in Figure 16). The Aviador Lot, which could be used for construction staging, is approximately 100 feet from residences on Aviador and Roblar avenues.

SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

12kV Power Distribution Replacement Project

FIGURE 16
NOISE MONITORING LOCATIONS

Impacts and Mitigation Measures

Impact NO-1: The proposed project would not generate 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 Airport is not subject to the building and zoning ordinances of San Mateo County, the City of Millbrae, the City of South San Francisco, or the City and County of San Francisco.[59] The San Francisco Planning Department uses a criterion of 10 dB above the ambient noise level to assess substantial temporary ambient noise level increases from construction. A 10 dB increase in ambient noise levels corresponds to a perceived doubling of loudness. This criterion applies at the property lines of the nearest sensitive receivers. The planning department also analyzes construction noise using guidance provided in the Construction Noise Assessment of the Federal Transit Administration Transit Noise and Vibration Assessment Manual.[60] Specifically, the planning department uses the general assessment daytime residential noise criterion of 90 dBA at residential receptors as developed by the Federal Transit Administration. The general assessment criteria establish construction noise limits, summarized in **Table 11**. To evaluate a reasonable worst-case scenario, the analysis assumes that the two loudest pieces of equipment would operate simultaneously at the same location.

Table 11 Federal Transit Administration General Assessment Criteria for Construction Noise Limits

	One-Hour L_{eq} (dBA)	
Land Use	Day	Night
Residential	90	80
Commercial	100	100
Industrial	100	100

SOURCE: Federal Transit Administration, Office of Planning and Environment, *Transit Noise and Vibration Impact Assessment Manual*, September 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed September 13, 2024.

ABBREVIATIONS: dBA = A-weighted decibels; L_{eq} = equivalent continuous sound level representing the average sound level over a period of time

NOTES: Day = 7 a.m. to 10 p.m.; Night = 10 p.m. to 7 a.m.

If any of the above criteria are exceeded (10 dB increase in ambient noise levels, 90 dBA at noise-sensitive receptors), the planning department would evaluate the temporal frequency, duration, and intensity of the exceedance when determining whether construction noise could result in a substantial temporary increase in ambient noise levels.

[59] California Government Code sections 53090 and 53091 grant a city or county intergovernmental immunity from complying with another governmental body's zoning and building permit laws

[60] U.S. Department of Transportation, Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, Report No. 0123, September 2018, Transit Noise and Vibration Impact Assessment Manual (Report 0123) | FTA, accessed November 12, 2024.

Daytime Construction Noise Evaluation

Table 12 shows the hourly maximum noise levels produced by various types of equipment, as indicated in Section A.5, Construction, proposed by the project sponsor at a reference distance of 50 feet from the equipment as well as the 100-foot distance.

Table 12 Maximum Noise Levels from Construction Equipment

Construction Equipment	Noise Level at 50 Feet (dB, L_{max})	Noise Level at 100 Feet (dB, L_{max})
Vibratory Compactor	83	77
Forklifts	83	78
Grader	81	75
Pickup truck	71	65
Dump Truck	73	67
SuperDump	73	67
Tractor	80	74
Water Truck	71	65

SOURCE: Federal Highway Administration, *Roadway Construction Noise Model User's Guide*, 2006.

ABBREVIATIONS: dB = decibels; L_{max} = maximum noise level

The analysis of daytime construction noise quantitatively evaluated noise from the two loudest pieces of equipment at sensitive receptor locations to determine whether construction noise would exceed FTA's criteria of 90 dBA at a residential receptor during daytime hours or would exceed the ambient noise level by 10 dBA. If either exceedance would occur, the evaluation then qualitatively considered the frequency, duration, and intensity of noise levels in determining whether the proposed project would result in a significant noise impact. Construction noise was also considered relative to FTA's commercial and industrial general assessment criterion of a 100 dBA noise limit, as shown in **Table 13**. Table 13 shows the worst-case noise levels for each major phase of construction.

As shown in Table 13, the equivalent continuous construction sound levels representing the average sound level over a period of time (L_{eq}) would range from 59 to 73 dBA at the nearest daytime receptor at a distance of 210 to 300 feet throughout the construction period. The construction noise would be below FTA's general assessment criterion of 90 dBA for residential land uses.

Table 13 Exterior Noise at the Nearest Offsite Sensitive Use from Daytime Construction

Construction Phase	Nearest Offsite Sensitive Receptor	Distance to Receptor (feet)[a]	Existing Monitored Noise Level (dBA L_{eq})[b]	Loudest Two Noise Sources	Estimated Construction Noise Level (dBA L_{eq})	Exceed 90 dBA Exterior Daytime Standard?	Resultant Noise Level (Existing + Construction) (dBA L_{eq})	Increase over Existing (dBA L_{eq})	Exceed Ambient + 10 dBA Standard?
Site Preparation and Vegetation Removal	7th Avenue Residences	170	49	Grader, Tractor	73	No	73	24	Yes
Access Road Installation	Belle Air Elementary School	210	49	Grader, Tractor	71	No	71	22	Yes
Access Pad Installation	Belle Air Elementary School	300	49	Grader, Tractor	68	No	68	19	Yes
First Circuit Cable Removal and Installation	Belle Air Elementary School	300	49	Pickup Truck, Water Truck	59	No	59	10	No
Second Circuit Cable Removal and Installation	Belle Air Elementary School	300	49	Pickup Truck, Water Truck	59	No	59	10	No
Aviador Lot Construction Staging	Roblar Avenue Residences	200	62	Loader, Forklift	69	No	70	8	No

SOURCE: Data compiled by Environmental Science Associates in 2024.

ABBREVIATIONS: dBA = A-weighted decibels; L_{eq} = equivalent continuous sound level representing the average sound level over a period of time

NOTES:

a. The approximate distances are measured from the nearest edge of the construction activity to the nearest sensitive-receptor property line.
b. Existing noise levels in the project area range between 49 and 72 dBA, but the monitored noise level of 49 dBA in this table is specific to the nearest receptor being analyzed, at 7th Avenue Residences and Belle Air Elementary School (where the potential for noise impacts would be highest).

For the evaluation of noise impacts with respect to the 10 dBA increase above ambient noise levels, construction noise was added to the daytime ambient L_{eq} noise level in the project area, which ranges from approximately 59 to 73 dBA. Existing noise levels in the project area were monitored to be 49, 61, and 72 dBA, with the largest construction noise increases occurring at the sensitive receptor nearest to the project site (where the potential for noise impacts would be highest), where the noise level measured 49 dBA. Daytime noise during all construction phases, except the circuit cable removal and installation phases, would result in an increase of greater than 10 dBA over existing levels at the nearest sensitive receptor. The duration of noisy activity would vary during the site preparation and vegetation removal, access road installation, and access pad installation phases but would not be isolated to one location. Generally, site prep and road installation is linear work that would proceed at a rate of approximately 100 feet per day and would therefore only affect a given receptor for a week at a time. Similarly, access pad installation would involve above-surface grading for only a week or two, after which installation of forms and gravel pouring would result in reduced noise levels. Although the daytime construction noise may at times exceed 10 dBA over existing levels, given the limited duration of the noise exposure to any given receptor, this construction noise impact would be ***less than significant***.

Table 14 shows the construction noise levels expected to be generated during daytime construction activities and compares them to the 45 dBA interior standard for Belle Air Elementary School. A standard assumption of exterior-to-interior noise reduction of 25 dBA with windows closed was applied for the school uses.[61]

As shown in Table 14, estimated interior noise levels at Belle Air Elementary School would not exceed the 45 dBA interior standard. Therefore, the daytime construction interior noise impact would be ***less than significant***.

Construction Truck Hauling Noise Impacts

Construction of the proposed project would require the use of on-road vehicles to deliver and haul materials to and from the site. Substation BA would be accessed through Gate L, located at 7th and Angus avenues in the City of San Bruno. Maximum daily haul and vendor truck trips are anticipated to be approximately 20 one-way truck trips per day. Spread across the proposed 10-hour workday, maximum hourly truck trips would be approximately two per hour. These two hourly truck trips would contribute 50.1 dBA to the hourly L_{eq} level at 50 feet from the roadway center of 7th and Angus avenues.[62] As shown in Table 10, p. 70, daytime hourly L_{eq} monitored in the project vicinity is 49 dBA. The addition of the project's haul and vendor trucks would result in an increase of 0.9 dBA over existing noise levels and would not result in a perceptible increase in noise. Daily haul and vendor truck trips for access to Manhole PD-B500 and Manhole PD-B504 via Gate J and Gate H, respectively, would have a similar existing noise environment as at 7th and Angus avenues and the same increase in noise levels. Therefore, there would be no substantial increase in noise from construction traffic and this impact would be ***less than significant***.

As described under Section A, Project Description, potential construction staging laydown and worker parking would occur within the Aviador Lot. Approximately eight truck trips per day would access the Aviador Lot to deliver or distribute gravel, or about one truck trip per hour. Construction haul trucks traveling to and from the staging area would typically access regional transportation facilities at the nearby U.S. 101 ramps on Millbrae Avenue, and consequently, would not increase noise levels along local roadways near

[61] U.S. Environmental Protection Agency, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, March 1974, http://nepis.epa.gov/Exe/ZyPDF.cgi/2000L3LN.PDF?Dockey=2000L3LN.pdf, accessed September 27, 2024.
[62] Based on the Federal Highway Administration's Traffic Noise Model.

noise-sensitive receptors. Therefore, proposed project haul trucks are not expected to generate noise impacts to noise-sensitive land uses.

Table 14 Interior Noise at the Nearest Offsite Sensitive Use from Daytime Construction

Construction Phase	Nearest Offsite Sensitive Receptor	Distance to Receptor (feet)[a]	Existing Monitored Noise Level (dBA L_{eq})[b]	Loudest Two Noise Sources	Estimated Construction Noise Level (dBA L_{eq})	Resultant Noise Level (Existing + Construction) (dBA L_{eq})	Existing plus Construction Noise Interior Level (dBA)[c]	Exceed Ambient + 10 dBA Standard?
Site Preparation and Vegetation Removal	Belle Air Elementary School	310	49	Grader, Tractor	68	68	43	No
Access Road Installation	Belle Air Elementary School	310	49	Grader, Tractor	68	68	43	No
Access Pad Installation	Belle Air Elementary School	400	49	Grader, Tractor	66	66	41	No
First Circuit Cable Removal and Installation	Belle Air Elementary School	400	49	Pickup Truck, Water Truck	56	57	32	No
Second Circuit Cable Removal and Installation	Belle Air Elementary School	400	49	Pickup Truck, Water Truck	56	57	32	No

SOURCE: Data compiled by Environmental Science Associates in 2024.

ABBREVIATIONS: dBA = A-weighted decibels; L_{eq} = equivalent continuous sound level representing the average sound level over a period of time

NOTES:

a. The approximate distances are measured from the nearest edge of the construction activity to the nearest structure.
b. Existing noise levels in the general project area range between 49 and 72 dBA, but the monitored noise level of 49 dBA in this table is specific to the nearest receptor being analyzed, at Belle Air Elementary School (where the potential for noise impacts would be highest).
c. Assumes a 25 dBA exterior-to-interior noise reduction attributable to standard building construction materials and windows closed.

Operational Noise

While operational vehicle trips on new gravel roadway surfaces would have a different noise-generating characteristic than those on the existing dirt roadways, given the infrequency of operational trip generation, a significant increase in operational noise in the project area and surrounding environment would not occur. The proposed project would replace the existing 12 kV cables and there would be no increase in the number of employees or in the level of operations. Therefore, the proposed project would have ***no impact*** with respect to an increase in operational noise associated with the new electrical infrastructure.

Impact NO-2: The proposed project would not generate excessive groundborne vibration or groundborne noise levels. ***(Less than Significant)***

The proposed project's construction activities could result in vibration impacts. Construction-related vibration has the potential to affect modern or historic structures or, if occurring during nighttime hours, can result in sleep disturbance. Construction vibration can also affect vibration-sensitive equipment, but there are no hospitals or medical facilities near the project site that may contain vibration-sensitive equipment, such as magnetic resonance imaging equipment or high-resolution lithographic, optical, or electron microscopes.

Construction Vibration

The results of vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to structural damage at the highest levels. Construction activities for the proposed project would include vegetation clearing and laying gravel, which would have the potential to generate low levels of groundborne vibration. Thus, existing structures located within 100 feet of the project site could be exposed to the generation of excessive groundborne vibration or groundborne noise levels related to construction activities.

Groundborne vibration levels resulting from construction activities at the project site were estimated using data published by FTA.[63] Potential vibration levels resulting from construction of the proposed project were identified for offsite locations based on their distance from construction activities.

This analysis uses the vibration criteria established in Caltrans' Transportation and Construction Vibration Guidance Manual document to evaluate the impact of vibration on buildings. The most frequently used method to describe vibration impacts on buildings is peak particle velocity (PPV). The Caltrans guidelines for assessing vibration damage potential to various types of buildings range from 0.08 to 0.12 inch per second PPV for extremely fragile historic buildings, ruins, and ancient monuments to 0.50 to 2.0 inch per second PPV for modern industrial/commercial buildings.

The proposed project would not involve the types of construction activities that could generate excessive groundborne vibration, such as impact pile-driving or blasting for demolition. However, loaded trucks and equipment used for compaction operations, such as a vibratory compactor, could generate varying degrees of groundborne vibration (**Table 15**). The PPV levels for the types of construction equipment that would operate during construction of the proposed project, and vibration levels at the closest structures, are also identified in Table 15. Compaction activities at the project site could occur 280 feet from the nearest adjacent residential buildings at Huntington Avenue. As shown in Table 15, temporary groundborne vibration levels from the vibratory compactor could reach approximately 0.005 inch per second PPV at a distance of 280 feet.

[63] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed September 17, 2024.

Table 15 Maximum Vibration Levels from Construction Equipment

Equipment	Approximate PPV (inch per second) 25 feet (FTA reference Level)	280 feet	Applicable Caltrans Vibration Criterion [a]
Vibratory Compactor	0.21	0.005	0.25
Loaded Trucks	0.076	0.002	0.25

SOURCES: Federal Transit Administration, Office of Planning and Environment, *Transit Noise and Vibration Impact Assessment Manual*, September 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed September 13, 2024; California Department of Transportation, *Transportation and Construction Vibration Guidance Manual* (Table 19, p. 38), September 2020; Data compiled by Environmental Science Associates in 2024.

ABBREVIATIONS: FTA = Federal Transit Administration; PPV = peak particle velocity

a. Criterion are Caltrans vibration guidelines for potential damage to historic structures from continuous sources.

As shown in Table 15, p. 78, construction activities within 280 feet of the adjacent buildings would result in vibration levels that would not exceed the Caltrans criteria of 0.254 inch per second PPV applicable to historic structures or 0.5 inch per second PPV applicable to modern structures (Huntington Avenue residences). Construction activities near the existing structures at Huntington Avenue would not result in structural damage and this impact would be ***less than significant***.

Impact NO-3: The proposed project would not expose people residing or working in an airport land use plan area to excessive noise levels. *(Less than Significant)*

The project site is approximately 0.4 mile from the nearest Airport runway. The northern end of the project site is located inside the 65 dB community noise equivalent level noise contour of Airport operations.[64] However, the proposed project would not introduce a new noise-sensitive land use in the vicinity of the Airport. Therefore, the proposed project would not expose new people residing near or working at the project site to excessive noise levels and ***a less-than-significant impact*** would occur.

Impact C-NO-1: The proposed project in combination with cumulative projects would not result in a significant cumulative impact related to noise and vibration. *(Less than Significant)*

The geographic context for the analysis of potential cumulative impacts related to noise and vibration consists of the conservation, development, and infrastructure projects generally located on and within 900 feet of the project site. Those projects are listed in Table 7, p. 23, and mapped on Figure 11, p. 26.

Construction Noise

Construction activities in the project vicinity, such as grading or construction of other buildings in the area, would occur on a temporary and intermittent basis. Project construction–related noise would not substantially increase ambient noise levels at locations greater than a few hundred feet from the project site.

[64] Environmental Science Associates, *San Francisco International Airport, 14 Code of Federal Regulations (CFR) Part 150 Study Update Noise Compatibility Program*, 2018, https://www.flysfo.com/sites/default/files/pdf/P150_Final_NCP_complete.pdf, accessed September 27, 2024; Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018.

Two development projects are close enough (within 500 feet) to combine with the noise created during construction of the proposed project to result in a cumulative construction noise impact.

The Substation Transformer Bank Upgrade project, north of the project site, proposes to replace two existing electrical transformers and install a spare transformer at a substation located on the WOB property at SFO. Because this cumulative project would entail construction to add new transformers within the substation and because the proposed project would require deenergizing of cable circuits, construction of these two projects would not occur simultaneously and there would be no cumulative construction noise impact.

The SFGS RAP provides a comprehensive management framework for the conservation of sensitive biological resources on the SFO-owned WOB property. Construction equipment would be dispersed in various areas of the site for vegetation removal and would not consist of heavy machinery. Therefore, this cumulative project would not combine with construction of the proposed project to result in a significant cumulative impact.

The Aviador Lot is an existing staging area for the Airport and has existing truck and off-road equipment activity. As discussed above, the proposed project would generate, at most, one hourly truck trip to the staging area for gravel deliveries. Noise from this single hourly truck trip would not substantially add to the existing ambient noise level of the Aviador Lot, which is located adjacent to U.S. 101 and its associated noise levels.

For these reasons, cumulative construction-related noise impacts from the proposed project would be ***less than significant***.

Operational Noise

The proposed project would have no impact with respect to an increase in operational noise. Additionally, as mentioned above, the Substation Transformer Bank Upgrade project consists of replacing two existing electrical transformers and installing a spare transformer at a substation located on the WOB property at SFO. The substation already generates noise from operation of the existing transformer and corona discharge[65] along the subtransmission lines. The proposed project is not expected to further contribute cumulatively to mechanical equipment noise because it would not generate new operational noise. Therefore, the proposed project would result in ***less-than-significant*** cumulative impacts related to operational noise.

Construction Vibration

Of the 10 cumulative projects identified within 0.25 mile of the project site, only the Substation Transformer Bank Upgrade project and the SFGS RAP would be located within 25 feet of the project site. Therefore, the cumulative context for construction vibration impacts is the immediate area surrounding the project site. Under the cumulative scenario, the Substation Transformer Bank Upgrade project consists of replacing two existing electrical transformers and installing a spare transformer at a substation located on the WOB property at SFO. If construction of the proposed project were to overlap with construction activities for the Substation Transformer Bank Upgrade Project, cumulative vibration levels could exceed the building damage threshold (0.5 inch per second PPV) for the closest non-historic buildings at 7th Avenue. Operation

[65] A corona discharge is an electrical phenomenon that occurs when a high-voltage conductor ionizes the surrounding air. Audible noise generated by corona discharge is characterized as a hissing or crackling sound that may be accompanied by a hum.

of standard construction equipment and activities generates vibration levels below the applicable 0.5 inch per second PPV threshold for non-historic structures at a distance of 280 feet.

The proposed project, in combination with the cumulative Substation Transformer Bank Upgrade project, would not result in a significant cumulative impact due to the distance between the non-historic buildings and construction activities of approximately 280 feet from the proposed project, and approximately 200 feet from the Substation Transformer Bank Upgrade project. The SFGS RAP would occur at an even longer distance to the nearest residential receptor on San Antonio Avenue. The proposed project would not combine with cumulative projects to create a significant vibration impact. This impact would be ***less than significant***.

E.8 Air Quality

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
8. AIR QUALITY. 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, state, or regional 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?	☐	☐	☒	☐	☐

Environmental Setting

The Bay Area Air Quality Management District (air district) is the regional agency with jurisdiction over the nine-county San Francisco Bay Area Air Basin (air basin), which includes San Francisco, Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and Napa counties and portions of Sonoma and Solano counties. The air district is responsible for attaining and maintaining air quality in the air basin within federal and state air quality standards, as established by the federal Clean Air Act and the California Clean Air Act, respectively. Specifically, the air district has the responsibility to monitor ambient air pollutant levels throughout the air basin and to develop and implement strategies to attain the applicable federal and state standards. The federal and state Clean Air Acts require plans to be developed for areas that do not meet air quality standards, generally.

The most recent air quality plan, the 2017 Clean Air Plan, was adopted by the air district on April 19, 2017. The Clean Air Plan updates the most recent Bay Area ozone plan, and in accordance with the requirements of the state Clean Air Act to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gases in a single, integrated plan; and establish emission control measures to be adopted or implemented. The Clean Air Plan contains the following primary goals:

- Protect air quality and health at the regional and local scale: attain all state and national air quality standards, and eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Protect the climate: reduce Bay Area greenhouse gas emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The Clean Air Plan represents the most current applicable air quality plan for the air basin. Consistency with this plan is the basis for determining whether the proposed project or residential variant would conflict with or obstruct implementation of air quality plans (checklist question E.8.a).

Criteria Air Pollutants

In accordance with the state and federal Clean Air Acts, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. These air pollutants are termed criteria air pollutants because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. The air basin is designated as either in attainment[66] or unclassified for most criteria pollutants with the exception of ozone, $PM_{2.5}$, and PM_{10}[67] for which these pollutants are designated as non-attainment for either the state or federal standards. Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NOx).

Table 16 identifies criteria air pollutant significance thresholds adopted by the air district. By its very nature, regional air pollution is largely a cumulative impact in that no single project is sufficient in size, by itself, to result in non-attainment of air quality standards. Projects that would result in criteria air pollutant emissions falling below these significance thresholds would not violate an air quality standard, contribute substantially to an air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants within the air basin. If a project's contribution to cumulative air quality impacts is considerable, then the project's impact on air quality would be considered significant.[68]

[66] "Attainment" status refers to those regions that are meeting federal and/or state standards for a specified criteria pollutant. "Non-attainment" refers to regions that do not meet federal and/or state standards for a specified criteria pollutant. "Unclassified" refers to regions where there is not enough data to determine the region's attainment status for a specified criteria air pollutant.
[67] PM10 is often termed "coarse" particulate matter and is made of particulates that are 10 microns in diameter or smaller. PM2.5, termed "fine" particulate matter, is composed of particles that are 2.5 microns or less in diameter.
[68] Bay Area Air Quality Management District, *2022 California Environmental Quality Act Air Quality Guidelines*, Revised April 20, 2023, https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines, accessed December 2, 2024.

Table 16 Criteria Air Pollutant Significance Thresholds

Pollutant	Construction Thresholds Average Daily Emissions (lb/day)
ROG	54
NO_X	54
PM_{10}	82 (exhaust)
$PM_{2.5}$	54 (exhaust)
PM_{10}/$PM_{2.5}$ (fugitive dust)	ASCMs Division 01 33 16, Division 01 35 13.43, Division 01 35 43.06, and Division 01 57 00 or other best management practices

SOURCE: Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, April 2022, https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines, accessed December 9, 2024.

ABBREVIATIONS: lb/day = pounds per day; NO_X = oxides of nitrogen; PM = particulate matter; $PM_{2.5}$ = PM less than 2.5 microns in diameter; PM_{10} = PM less than 10 microns in diameter; ROG = reactive organic gases; ASCMs = Airport Standard Construction Measures

The significance thresholds for criteria pollutants are based on the stationary source limits in air district regulation 2, rule 2, which requires that any new source that emits criteria air pollutants above the emissions limits, shown in Table 16, must offset those emissions. The air district's California Environmental Quality Act Air Quality Guidelines[69] and supporting materials[70,71] provide additional evidence to support these thresholds. Projects that would result in criteria air pollutant emissions below these significance thresholds would not result in a cumulatively considerable net increase in non-attainment criteria air pollutants within the air basin.[72] Due to the temporary nature of construction activities, only the average daily thresholds are applicable to construction phase emissions.

Fugitive Dust

Fugitive dust emissions are typically generated during construction phases. Studies have shown that the application of best management practices (BMPs) at construction sites significantly control fugitive dust and individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.[73] The air district has identified a number of BMPs to control fugitive dust emissions from construction activities. The Airport requires a number of measures to control fugitive dust, and these BMPs are an effective strategy for controlling construction-related fugitive dust.

[69] Bay Area Air Quality Management District, *2022 California Environmental Quality Act Air Quality Guidelines*, Revised April 20, 2023, https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines, accessed December 2, 2024.
[70] Bay Area Air Quality Management District, Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance, October 2009, https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justificationreport-oct-2009.pdf?la=en, accessed December 2, 2024.
[71] San Francisco Planning Department, Air Quality and Greenhouse Gas Guidelines, July 2024. This document is available online at https://cityplnmextnl.sfgov.org/SharedLinks.aspx?accesskey=3e9fec6a8667b65b738c579761d227c18e70dab56dac5c85baf53b83671b2e15&VaultGUID=A4A7DACD-B0DC-4322-BD29-F6F07103C6E0, accessed December 2, 2024.
[72] Bay Area Air Quality Management District, *2022 California Environmental Quality Act Air Quality Guidelines*, Revised April 20, 2023, https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines, accessed December 2, 2024.
[73] Western Regional Air Partnership. 2006. WRAP Fugitive Dust Handbook. September 7, 2006. This document is available online at https://www.gsweventcenter.com/Draft_SEIR_References/2006_0907_WRAPDust.pdf, accessed December 2, 2024.

San Francisco International Airport Standard Construction Measures

The airport commission operates the Airport on behalf of the City. The airport commission requires that standard construction measures be included in construction contracts and through the Airport Rules and Regulations; these are referred to as the ASCMs. Additionally, the Airport is obligated by federal, state, and local regulations, including existing resource agency permits, to implement construction measures specific to certain activities, areas, and natural resources.

The majority of projects on Airport property, ranging from routine maintenance to major capital construction projects, are approved by the airport commission or by Airport staff on behalf of the airport commission, and are constructed by contractors. The Airport's contracts with contractors include certain Division Documents, which are articles that stipulate materials standards, project management requirements, and construction management practices by which contractors must abide during Airport construction activities. The Division Documents' standard construction measures and BMPs are designed to reduce or eliminate the potential for environmental impacts associated with Airport construction projects.

With respect to air quality, dust control measures are specified for projects involving earthwork; excavation; demolition; or remediation and removal of contaminated soil, sludge, and water, and for activities that may result in the use or discovery of hazardous materials. Division Document 01 57 00 (Temporary Controls) specifies dust control measures. The Temporary Controls require contractors to implement an onsite maintenance program, avoid or minimize emissions from construction vehicles and equipment, and minimize direct and fugitive emissions from coating, blasting, and painting activities through equipment maintenance and BMPs. Activities that may result in discovery of contaminated soils, sludge, or water require compliance with the air district's Particulate Matter Rule (Regulation 6, Rule 1) and preparation of a materials management plan.

The following ASCMs in the Division Documents address air quality impacts:

- **Division 01 33 16: Hazard and Hazardous Material Investigation and Remediation** requires contractors to prepare a project-specific materials management plan, including but not limited to means, methods, and procedures for handling contaminated soil, sludge, and water; site security and fencing; excavation dewatering; dust control; stormwater and erosion control; material tracking, recordkeeping, and disposal; and site plans illustrating the management areas.
- **Division 01 35 13.43: Regulatory Requirements for Hazardous Waste** formalizes implementation of air district Rules and Regulations requirements with respect to fugitive dust control for asbestos demolition (air district Regulation 11, Rule 2-303) and required attainment of permits to treat contaminated soil and groundwater.
- **Division 01 35 43.06: Earthwork** requires that the contractor take proper and efficient steps to control dust.
- **Division 01 35 43.16 Excavation and Disposal of Contaminated Soil, Sludge, and Water** requires the contractor to suspend work if contractor encounters contaminated material during excavation and disposal.
- **Division 01 57 00: Temporary Controls** requires contractors performing work under Airport projects to assume responsibility for dust control and to furnish the labor, equipment, and means required to carry out proper and efficient measures wherever and whenever dust control is necessary, to prevent operations from producing dust damage, health impacts, and nuisance to persons and property.

Local Health Risks and Hazards

In addition to criteria air pollutants, individual projects may emit toxic air contaminants (TACs). TACs collectively refer to a diverse group of air pollutants that may cause chronic (long-duration) and acute (severe but short-term) adverse effects on human health, including carcinogenic effects.

Unlike criteria air pollutants, TACs are not subject to ambient air quality standards; rather, they are regulated by the air district using a risk-based approach to determine which sources and pollutants to control and the degree of control. A health risk assessment (HRA) is an analysis that estimates human health exposure to toxic substances. When considered together with information regarding the toxic potency of the substances, an HRA provides quantitative estimates of health risks.[74]

Diesel particulate matter (DPM), a byproduct of diesel fuel combustion, is the main TAC of concern from the proposed project. The California Air Resources Board (air board) identified DPM as a TAC in 1998, based primarily on evidence demonstrating cancer effects in humans.[75] The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other TAC routinely measured in the region.[76]

Exposures to fine PM ($PM_{2.5}$) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted-activity days for short-term exposure. Long-term exposure has been linked with premature death, particularly in people who have chronic heart or lung disease, and reduced lung function growth in children.[77] Health risks from annual average $PM_{2.5}$ concentrations resulting from proposed project $PM_{2.5}$ emissions are also considered in this analysis.

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Land uses such as residences, schools, children's day care centers, hospitals, and nursing and convalescent homes are considered to be the most sensitive to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress. Residences are considered sensitive receptors because these individuals may be present, and their exposure time is greater than that for other land uses. Exposure assessment guidance published by the air district in January 2016 adopted the assumption that residences would be exposed to air pollution 24 hours a day, 350 days a year, for 30 years.[78] Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

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[74] In general, a health risk assessment is required if the air district concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. The applicant is then subject to a health risk assessment for the source in question. Such an assessment generally evaluates chronic, long-term effects, estimating the increased risk of cancer as a result of exposure to one or more TACs.

[75] California Air Resources Board, *Fact Sheet: The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines*, October 1998, https://ww2.arb.ca.gov/sites/default/files/classic/toxics/dieseltac/factsht1.pdf, accessed December 2, 2024.

[76] The ambient concentrations of carcinogenic TACs monitored at the Arkansas Street station and the estimated cancer risk from a lifetime exposure (70 years) to these substances. California Air Resources Board, Ambient Air Toxics Summary, 2022, http://www.arb.ca.gov/adam/toxics/sitesubstance.html, accessed December 2, 2024.

[77] California Air Resources Board, "Inhalable Particulate Matter and Health ($PM_{2.5}$ and PM_{10})," n.d., https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health, accessed December 2, 2024.

[78] Bay Area Air Quality Management District, *BAAQMD Air Toxics NSR Program Health Risk Assessment Guidelines*, December 2016, https://www.baaqmd.gov/about-air-quality/current-air-quality/air-monitoring-data/#/aqi-highs?date=2024-11-24&view=hourly, accessed December 2, 2024.

Approach to Analysis

Thresholds of Significance

The threshold of significance used to evaluate community health risks and hazards from new sources of TACs is based on the potential for the proposed project to contribute cumulatively considerable incremental health risks at sensitive receptor locations. The air district considers new sources to not make a considerable contribution to cumulative health risks when a project's contribution is below 0.3 micrograms per cubic meter (μg/m^3) $PM_{2.5}$ concentration and an excess cancer risk of 10.0 per million persons exposed.[79] A lower significance threshold is required for locations with high background risk levels to ensure that the proposed project's contribution to existing health risks would not be significant. The lower threshold is based on the San Francisco Citywide HRA. [80] This analysis identified areas of San Francisco with high background risk levels and refers to it as the Air Pollutant Exposure Zone (APEZ). The APEZ is defined as areas with cancer risk probability greater than 100 per million and annual average PM2.5 concentrations greater than 10 μg/m^3. Projects located in the APEZ use this lower risk threshold. Since the proposed project is outside of the Citywide HRA analysis area, it is not known if the backgrounds meets APEZ levels. Therefore, to be conservative, this analysis uses the lower thresholds that are used for the APEZ. For sensitive receptor locations with high background risk levels, a substantial health risk contribution threshold is defined as a $PM_{2.5}$ concentration at or above 0.2 μg/m^3 or an excess cancer risk at or greater than 7.0 per million at sensitive receptor locations.[81]

Table 17 identifies project-level health risk significance thresholds. Consistent with the 2024 San Francisco Planning Department's *Air Quality and Greenhouse Gas Analysis Guidelines*, health risks from DPM and annual-average $PM_{2.5}$ concentrations were estimated at all sensitive receptors located within 3,280 feet (1,000 meters) of the Airport boundary to identify the maximum exposed individual sensitive receptor (MEISR), school receptor, and the maximum exposed individual worker (MEIW). In addition, health risks at the MEISR, school receptor, and MEIW from existing sources are provided in this analysis for informational purposes, because the health risk thresholds presented below only apply to the proposed project's incremental contribution to health risks and do not address existing health risks. The MEISR is the sensitive receptor with the highest modeled health risk. See *Air Quality Analysis Methods 12 kV Power Distribution Replacement Project Memorandum* (Air Quality Methods Memo), for a detailed description of all assumptions and methods used for the HRA.[82]

[79] Bay Area Air Quality Management District, 2022 CEQA Air Quality Guidelines, Revised April 20, 2023.
[80] San Francisco Department of Public Health and San Francisco Planning Department, *The San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, September 2020.
[81] A 0.2 μg/m^3 increase in $PM_{2.5}$ would result in a 0.28 percent increase in non-injury mortality or an increase of about twenty-one excess deaths per 1,000,000 population per year from non-injury causes in San Francisco. This information is based on M. Jerrett, R. T. Burnett, R. Ma, C.A. Pope III, D. Krewski, K. B. Newbold, G. Thurston, Y. Shi, N. Finkelstein, E. E. Calle, and M. J. Thun, "Spatial Analysis of Air Pollution and Mortality in Los Angeles," *Epidemiology* 16 (2005): 727–736. The excess cancer risk has been proportionally reduced to result in a significance criterion of 7 per million persons exposed.
[82] Environmental Science Associates, *Air Quality Analysis Methods 12 kV Power Distribution Replacement Project (Case No. 2024-005910ENV)*, October 28, 2024.

Table 17 Excess Cancer Risk and Annual-Average $PM_{2.5}$ Concentration Thresholds

Affected Sensitive Receptors	$PM_{2.5}$ ($\mu g/m^3$)	Excess Cancer Risk (cases per million population)
Threshold for Construction		
Significance threshold for project contributions to sensitive receptors within high background risk levels [a,b]	0.2	7.0

SOURCES: Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, p. 7, http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justification-report-oct-2009.pdf?la=en, accessed July 25, 2024; Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, April 2022, p. 3-4, https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines, accessed July 25, 2024; San Francisco Department of Public Health, Environmental Health, Planning, *Memorandum to File regarding 2014 Air Pollutant Exposure Zone Map*, April 9, 2014; M. Jerrett, R. T. Burnett, R. Ma, C.A. Pope III, D. Krewski, K. B. Newbold, G. Thurston, Y. Shi, N. Finkelstein, E. E. Calle, and M. J. Thun, "Spatial Analysis of Air Pollution and Mortality in Los Angeles," *Epidemiology* 16:727–736, 2005.

ABBREVIATIONS: $\mu g/m^3$ = micrograms per cubic meter; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter

NOTES:

a. A 0.2 $\mu g/m^3$ increase in $PM_{2.5}$ emissions would result in a 0.28 percent increase in non-injury mortality or an increase of about 21 excess deaths per 1,000,000 population per year from non-injury causes in San Francisco. This information is based on Jerrett et al. (2005), cited above. The excess cancer risk has been proportionally reduced to result in a significance criterion of 7 per million persons exposed.
b. San Francisco Department of Public Health, Environmental Health, Planning, *Memorandum to File regarding 2014 Air Pollutant Exposure Zone Map* (April 9, 2014).

Impacts and Mitigation Measures

Impact AQ-1: The proposed project would not conflict with or obstruct implementation of the 2017 Clean Air Plan. (*Less than Significant*)

The most recently adopted air quality plan for the air basin is the air district's 2017 Clean Air Plan.[83] The Clean Air Plan is a road map that demonstrates how the San Francisco Bay Area will achieve compliance with the state ozone standards and how the region will reduce the transport of ozone and ozone precursors to neighboring air basins. In determining consistency with the Clean Air Plan, this analysis considers whether the proposed project: (1) supports the primary goals of the plan, (2) includes applicable control measures from the plan, and (3) avoids disrupting and hindering implementation of control measures identified in the plan. The primary goals of the Clean Air Plan are to (1) protect air quality and health at the regional and local scale; (2) eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and (3) protect the climate by reducing greenhouse gas emissions. To meet the primary goals, the plan recommends 85 specific control measures and actions. These control measures are grouped into various categories and include stationary and area source measures, mobile source measures, transportation control measures, land use measures, and energy and climate measures. To the extent that the air district has regulatory authority over an emissions source generated by the proposed project, the control measures may be requirements of the proposed project. Other measures in the plan not within the air district's regulatory authority may be advisory or are otherwise not specifically applicable to land use development projects.

The Clean Air Plan recognizes that, to a great extent, community design dictates individual travel mode, and a key long-term control strategy to reduce emissions of criteria pollutants, air toxics, and greenhouse gases

[83] Bay Area Air Quality Management District, *2017 Clean Air Plan: Spare the Air, Cool the Climate*, April 19, 2017, http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en, accessed November 22, 2024.

from motor vehicles is to channel growth into vibrant urban communities where goods and services are close at hand, and people have a range of viable transportation options.

The proposed project is consistent with these goals as it primarily involves underground work within existing infrastructure, minimizing surface disturbances and new sources of air pollution. While construction activities will generate some vehicle trips, the Airport would implement BMPs to limit emissions, such as utilizing low-emission equipment, optimizing routes to reduce idling, and controlling fugitive dust emissions.

The proposed project itself does not involve the construction of any new roadways or parking facilities that would induce additional vehicle trips. The proposed access road widening and access road construction would facilitate future maintenance-related and emergency access to the site and improve conditions for vehicles accessing the site but would not result in an increase in operational activity relative to existing conditions. Furthermore, by replacing aging electrical infrastructure, the proposed project may reduce the potential for future emergency repairs that could cause greater traffic disruption and associated emissions.

The proposed project focuses solely on replacing existing electrical infrastructure and would not introduce any new sources of operational air emissions. Therefore, the proposed project would not conflict with or obstruct the implementation of the 2017 Clean Air Plan. This impact would be ***less than significant***.

Impact AQ-2: The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal, state, or regional ambient air quality standard. (*Less than Significant*)

Construction activities result in emissions of criteria pollutants from fugitive dust (PM_{10} and $PM_{2.5}$) and tailpipe exhaust (ROG, NOx, PM_{10}, and $PM_{2.5}$) emissions. Tailpipe exhaust emissions are the result of the combustion of fuel from on-road and off-road vehicles and other construction equipment. The proposed project involves replacing approximately 7,700 feet of 12 kV electrical cables within existing underground duct banks, limiting the extent of surface disturbance. Construction of new access roads would be limited to approximately 0.6 miles of single-lane gravel roads on the WOB property, and widening of existing access roads would occur along approximately 0.3 miles. Five permanent gravel access pads would be installed around existing manholes, each totaling approximately 2,100 square feet. No new buildings or structures would be constructed as part of the proposed project. See the Air Quality Methods Memo for a detailed description of the assumptions and methods used to calculate air quality emissions, and the *Air Quality Analysis Results Memorandum for the 12 kV Power Distribution Replacement Project* (Air Quality Results Memo), for additional calculations and results to the air quality emissions below.[84]

Fugitive Dust

Proposed project-related site preparation, access road construction, and access pad construction activities may cause wind-blown dust that could contribute particulate matter into the local atmosphere. Specifically, the removal of vegetation and ground disturbance during access road and pad construction could generate dust. To minimize fugitive dust, the Airport is required to implement the ASCMs identified above. These ASCMs would avoid or minimize the impacts of construction-generated fugitive dust.

[84] Environmental Science Associates, *Air Quality Analysis Results Memorandum for the 12 kV Power Distribution Replacement Project (Case No. 2024-005910ENV)*, January 13, 2025.

Therefore, with implementation of the Airport's ASCMs, implementation of the proposed project would have a ***less-than-significant*** impact related to fugitive dust during construction.

Exhaust and Evaporative Emissions

Table 18 presents the average daily construction emissions for the proposed project by construction phase and year.

Table 18 Average Daily Unmitigated Construction Emissions by Construction Phase and Year for the Proposed Project

Year/Phase	Average Daily Emissions (pounds/day)			
	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
2026				
Site Preparation and Vegetation Removal	0.2	1.8	0.1	0.1
Access Road Installation	0.6	5.2	0.2	0.2
Access Pad Installation	0.2	2.0	0.1	0.1
2026 TOTAL	**1.1**	**9.0**	**0.3**	**0.3**
2027				
First Circuit Cable Removal and Installation	0.4	3.1	0.1	0.1
2027 TOTAL	**0.4**	**3.1**	**0.1**	**0.1**
2028				
Second Circuit Cable Removal and Installation	0.4	2.9	0.1	0.1
2028 TOTAL	**0.4**	**2.9**	**0.1**	**0.1**
Significance Threshold	54	54	82	54
Threshold Exceeded?	No	No	No	No

SOURCE: Environmental Science Associates, 2024.

ABBREVIATIONS: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = particulate matter less than or equal to 10 microns in diameter; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter

NOTE: Due to rounding, numbers in columns may not add to totals.

As shown in Table 18, no individual phase or year would exceed air district significance thresholds for construction activities. Therefore, construction of the proposed project would result in a ***less-than-significant*** impact with respect to criteria air pollutant emissions.

Impact AQ-3: The proposed project would not generate DPM or $PM_{2.5}$ emissions that would expose sensitive receptors to substantial pollutant concentrations. (*Less than Significant*)

Proposed project construction activities could expose sensitive receptors to substantial DPM and $PM_{2.5}$ concentrations, resulting in a localized health risk. Therefore, an HRA was conducted for the proposed

project to identify maximum health risks to offsite sensitive and onsite worker receptors from construction emissions of DPM and $PM_{2.5}$.

The closest sensitive receptors to the proposed project are residential and elementary school uses northwest of the project site, along 7th Avenue and 3rd Avenue, respectively. The residential and elementary school uses are located less than 1,000 feet from the proposed project. Additionally, the residential and school areas are close to the truck delivery routes and worker travel for construction.

Because of the proximity to proposed project construction activities, onsite workers were also included in the analysis. Exposure of onsite employees and tenants' employees located in the Airport terminal and administrative buildings to construction and operational TAC emissions was included in the analysis. Worker receptors were considered to be located in physical buildings within the Airport property boundary.

Existing Sources of Health Risk

Existing sources of health risk are those producing TAC emissions within 1,000 feet of the MEISRs, school receptor, and MEIWs. Therefore, this analysis evaluates community risk impacts from other existing sources near the MEISRs, school receptor, and MEIWs combined with risk impacts from implementation of the proposed project.

For existing mobile sources, the HRA obtained data from the air district's Mobile Source Screening Map for background roadway and background rail and railyard risk values at the MEISR, school receptor, and MEIW locations.[85] The mobile source information represents conservative health estimates reflective of the year 2022. Stationary sources within 1,000 feet of the MEISR, school receptor, and MEIW and their associated risk values were obtained from the air district's Permitted Sources Risk and Hazards Map.[86] Permitted stationary sources include a backup generator and a gasoline dispensing facility. The stationary sources are current as of 2022. The cancer risk and $PM_{2.5}$ values provided represent the risk at each stationary source (i.e., localized). To determine the health risk impact of these sources at the MEISR, school receptor, and MEIW locations, an equation based on distance that was acquired from the air district, was used to extrapolate the risk.[87] See the Air Quality Methods Memo, for a detailed description of the modeling methods for existing sources of TAC emissions and associated health risks.

Table 19 shows the lifetime excess cancer risk and annual-average $PM_{2.5}$ concentrations from the combined construction and existing background sources.

The air district provides significance thresholds for existing plus project sources: 100 per million for cancer risk and 0.8 $\mu g/m^3$ for annual average $PM_{2.5}$ concentrations. This threshold applies to the proposed project plus existing as shown in Table 19.

[85] Bay Area Air Quality Management District, Permitted Sources Risk and Hazards Map, June 2020, https://www.arcgis.com/apps/instant/sidebar/index.html?appid=7397543038c74281bf1eedeedb714dd3, accessed September 25, 2024.
[86] Ibid.
[87] Bay Area Air Quality Management District, Health Risk Calculator (Beta 4.0), 2020, https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/tools/baaqmd-health-risk-calculator-beta-4-0-xlsx.xlsx?la=en, accessed September 25, 2024.

Table 19 Uncontrolled Lifetime Excess Cancer Risk and Annual Average $PM_{2.5}$ Concentrations from Construction Plus Existing

Sensitive Receptor Type	Health Risks			
	Lifetime Excess Cancer Risk (chances per million)		Annual Average $PM_{2.5}$ Concentrations (µg/m³)	
	Sensitive Receptor Location (UTM X, UTM Y)	Proposed Project Maximum Impact	Sensitive Receptor Location (UTM X, UTM Y)	Proposed Project Maximum Impact
MEISR				
Project	(552560, 4164480)	0.9	(552560, 4164460)	<0.01
Mobile	—	10.7	—	0.30
Rail	—	29.4	—	0.04
Stationary	—	0.0	—	<0.01
Ambient [a]	—	NA	—	7.80
TOTAL EXISTING	**—**	**40.1**	**—**	**8.14**
TOTAL PROJECT + EXISTING	**—**	**41.0**	**—**	**8.14**
School				
Project	(552580, 4164200)	0.1	(552580, 4164200)	0.01
Mobile	—	8.1	—	0.22
Rail	—	40.4	—	0.05
Stationary	—	<0.1	—	<0.01
Ambient [a]	—	NA	—	7.80
TOTAL EXISTING	**—**	**48.4**	**—**	**8.07**
TOTAL PROJECT + EXISTING	**—**	**48.5**	**—**	**8.07**
MEIW				
Project	(553160, 4163500)	0.1	(553160, 4163500)	<0.01
Mobile [b]	—	13.1	—	0.91
Rail [b]	—	11.3	—	0.04
Stationary [b]	—	0.2	—	<0.01
Ambient [a]	—	NA	—	7.80
TOTAL EXISTING	**—**	**24.6**	**—**	**8.75**
TOTAL PROJECT + EXISTING	**—**	**24.7**	**—**	**8.75**

SOURCE: Environmental Science Associates, 2024.

ABBREVIATIONS: UTM = Universal Transverse Mercator; UTM – X = eastward-measured distance; UTM – Y = northward-measured distance; $PM_{2.5}$ = fine particulate matter less than 2.5 micrometers in aerodynamic diameter; µg/m³ = micrograms per cubic meters; NA = not applicable; MEISR = maximally-exposed sensitive receptor; MEIW = maximally-exposed worker receptor.

NOTES: Due to rounding, numbers in columns may not add to totals.

a. Ambient represents difference in measured and modeled $PM_{2.5}$. Concentrations from San Francisco Planning Department guidance (2024).
b. Cancer risk from mobile, rail, and stationary for the worker receptors were scaled from Bay Area Air Quality Management District screening tools to represent worker exposure parameters because the exposure parameters incorporated into the tool are for residential risk.

LIFETIME EXCESS CANCER RISK

According to the air board, studies have shown an association between the proximity of sensitive land uses to freeways and a variety of respiratory symptoms, exacerbation of asthma, and decreases in lung function in children. Siting sensitive uses near freeways increases both exposure to air pollution and the potential for adverse health effects. Because evidence shows that sensitive uses in an area within a 500-foot buffer of any freeway are at an increased health risk from air pollution, parcels located within 500 feet of freeways are considered to have high background risk levels.

As shown in Table 19, implementation of the proposed project would increase the lifetime excess cancer risk for the MEISR, school receptor, and MEIW, all of which are below the threshold. The MEISR is located west of U.S. 101 along 7th Avenue, the school receptor is located west of U.S. 101 at Belle Air Elementary School on 3rd Avenue, and the MEIW is at the United Cargo Hold on North McDonnell Road. These areas in general meet the criteria for high background risk levels due to their proximity to U.S. 101.

The air district's cancer risk data for existing sources was combined with that from the proposed project. The resulting cancer risk from existing plus proposed project sources would be less than the cumulative cancer risk threshold of 100 per million, resulting in a less-than-significant cancer risk impact.

ANNUAL-AVERAGE $PM_{2.5}$ CONCENTRATIONS

As shown in Table 19, the proposed project would increase the annual average $PM_{2.5}$ concentrations but they would remain below threshold at all receptor locations. The MEISR is located west of U.S. 101 along 7th Avenue, the school receptor is located west of U.S. 101 at Belle Air Elementary School on 3rd Avenue, and the MEIW is at the United Cargo Hold on North McDonnell Road. These areas in general meet the criteria for high background risk levels due to their proximity to U.S. 101 or proximity to high volume roadways, stationary TAC sources, and Airport TAC sources.

Prior to the combined existing sources plus proposed project's $PM_{2.5}$ concentrations, the air district's $PM_{2.5}$ data for existing sources was above the cumulative threshold of 0.8 ug/m^3. However, the proposed project's contribution to the total existing plus proposed project $PM_{2.5}$ concentrations is not considerable as it is below the project-level threshold, resulting in a less-than-significant $PM_{2.5}$ concentration impact.

Summary

In summary, Table 19 shows that for all MEISRs, school receptor, and MEIWs, the excess lifetime cancer risk would not exceed significance thresholds for construction of the proposed project. In addition, the annual-average $PM_{2.5}$ concentrations do not exceed significance thresholds at any MEISR, school receptor, or MEIW receptor location for construction of the proposed project. See the Air Quality Results Memo for additional detailed health risk results. Therefore, construction of the proposed project with respect to health risk would be ***less than significant*** and no mitigation is required.

Impact AQ-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people (*Less than Significant*)

The proposed project would not involve activities that are typically associated with the generation of odorous emissions. The proposed project focuses exclusively on the replacement of existing electrical cables and associated equipment within underground duct banks. It would not include the construction of any new

buildings, structures, or facilities that could potentially emit odors. The proposed project would not involve any land use changes or the introduction of any new materials or processes that could generate odorous emissions.

While some temporary odors may be generated during construction activities, these would primarily be associated with diesel exhaust from construction equipment and vehicles. The proposed project would require the use of graders, dump trucks, water trucks, compactors, and other heavy-duty equipment, which have the potential to emit diesel exhaust. However, these construction-related odors would be localized, temporary in nature, and would not persist upon project completion. The Airport would implement BMPs to minimize odors during construction. These practices may include ensuring that construction equipment is properly maintained and operated to minimize exhaust emissions, minimizing the idling of construction equipment and vehicles to reduce unnecessary emissions, scheduling construction activities, where feasible, to avoid periods of stagnant air or temperature inversions that could trap odors near the ground, and maintaining open communication with nearby residents and businesses to address any odor concerns that may arise.

The proposed project would not involve the use of any materials or processes that are known to generate strong or persistent odors. It would not include activities such as wastewater treatment, solid waste handling, chemical processing, or asphalt production, which are typical sources of odorous emissions. Furthermore, the proposed project would not involve any ground disturbance beyond the excavation required for access road and pad construction, minimizing the potential for disturbing soil or other materials that could release odors. Therefore, construction of the proposed project would result in a ***less-than-significant*** impact with respect to other emissions, such as odors.

Impact C-AQ-1. The proposed project in combination with cumulative projects would not result in a significant cumulative impact on air quality. (*Less than Significant*)

Cumulative Impacts

Air quality by its nature is a cumulative impact. The non-attainment status of the air basin indicates that a significant cumulative criteria pollutant impact already exists. The project-specific thresholds of significance for criteria air pollutants are based on levels by which new sources would not result in a cumulatively considerable net increase in nonattainment criteria air pollutants. Criteria air pollutant emissions associated with implementation of the proposed project are addressed under Impacts AQ-1 and AQ-2. Therefore, no separate cumulative criteria air pollutant analysis is provided.

This section presents information regarding potential cumulative health risks in combination with the existing plus proposed project health risks at the MEISRs, school receptor, and MEIWs. The air district identified a distance of 1,000 feet as an appropriate zone of influence for assessing health risk impacts and specifies that cumulative sources represent the combined total risk values of each individual source within the 1,000-foot evaluation zone.[88] Health risk impacts are localized, and TAC concentrations typically decrease substantially or can even be indistinguishable from upwind background concentrations beyond approximately 1,000 feet from the emissions source.[89] Therefore, the geographic context for cumulative

[88] Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017, p. 5-2.
[89] Bay Area Air Quality Management District, *Recommended Methods for Screening and Modeling Local Risks and Hazards*, May 2012, https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en&rev=3ed5e81662784057941d97b851900d19, accessed September 29, 2024.

health risk effects is evaluated considering cumulative projects within 1,000 feet of the proposed project's MEISRs, school receptor, and MEIWs.

Table 20 lists the cumulative projects and provides the expected risk sources associated with each project and the project distances from the proposed project's MEISRs, school receptor, and MEIWs. As shown, all but five of the cumulative projects are located at distances greater than 1,000 feet from the project MEISRs, school receptor, and MEIWs. However, because of the lack of available emissions data for the cumulative projects, cumulative health risks were not evaluated quantitatively.

Table 20 Cumulative Projects Considered for Cumulative Health Risk

Location	Project Name	Potential Source of Health Risk	Distance from MEISR (feet)	Distance from School Receptor (feet)	Distance from MEIW (feet)
West of Bayshore (WOB) property (including project site)	2019–2029 San Francisco Garter Snake Recovery Action Plan (Case No. 2008.0498ENA)	Construction DPM and $PM_{2.5}$	80 to 9,400 (project area spans large geographic area)	30 to 10,000+ (project area spans large geographic area)	500 to 6,100 (project area spans large geographic area)
WOB property (Station BA)	Substation Transformer Bank Upgrade Project (Case No. 2023-004665ENV)	Construction DPM and $PM_{2.5}$; operational emergency generator DPM and $PM_{2.5}$	240	950	3,600
WOB property (Station BA) and Airport area	12-Kilovolt Cable Replacement Project (Case No. 2023-009135ENV)	Construction DPM and $PM_{2.5}$	1,000 to 10,000+ (project area is in varying geographic locations)	1,000 to 10,000+ (project area is in varying geographic locations)	1,000 to 10,000+ (project area is in varying geographic locations)
Airport area east of U.S. 101	West Field Cargo Redevelopment (Case No. 2020-008656ENV)	Construction DPM and $PM_{2.5}$	2,200	1,600	1,250
Airport area east of U.S. 101	Consolidated Administration Campus Phase 2 (Case No. 2019-006583ETM)	Construction DPM and $PM_{2.5}$	2,150	1,600	1,950
Airport area east of U.S. 101	Plot 10F Demolition and Paving and Cargo Building 662 (Case No. 2022-003521ENV)	Construction DPM and $PM_{2.5}$	2,200	1,950	2,050

Location	Project Name	Potential Source of Health Risk	Distance from MEISR (feet)	Distance from School Receptor (feet)	Distance from MEIW (feet)
Airport area east of U.S. 101	Boarding Area G Gate Enhancements (Case No. 2023-009342ENV)	Construction DPM and $PM_{2.5}$	4,160	3,580	1,340
Airport area east of U.S. 101	Advanced Water Treatment System Upgrade (Case No. 2020-004658ENV)	Construction DPM and $PM_{2.5}$	1,000 to 10,000+ (project area is in varying geographic locations)	1,000 to 10,000+ (project area is in varying geographic locations)	50 to 10,000+ (project area is in varying geographic locations)
Airport area east of U.S. 101	SFO Recommended Airport Development Plan (Case No. 2017-007468ENV)	Construction DPM and $PM_{2.5}$; operational emergency generator and delivery truck DPM and $PM_{2.5}$; operational employee vehicle trip gasoline TOG and $PM_{2.5}$	1,000 to 10,000+ (project area is in varying geographic locations)	1,000 to 10,000+ (project area is in varying geographic locations)	50 to 10,000+ (project area is in varying geographic locations)
160 El Camino Real (San Bruno)	160 El Camino Real (San Bruno Application No. AR18-004 & UP18-019)	Construction DPM and $PM_{2.5}$	3,400	2,550	2,850

SOURCE: Data provided by SFO Planning & Environmental Affairs and compiled by Environmental Science Associates in 2024; City of San Bruno Major Development Projects, 2023.

ABBREVIATIONS: DPM = diesel particulate matter; MEISR = maximum exposed individual sensitive receptor; MEIW = maximum exposed individual worker; $PM_{2.5}$ = fine particulate matter less than 2.5 micrometers in aerodynamic diameter; TOG = total organic gases; WOB = West of Bayshore

NOTE: Refer to Table 7, p. 23, for a description of the cumulative projects.

The SFGS RAP provides a comprehensive management framework for the conservation of sensitive biological resources on the WOB property. Construction equipment would be dispersed in various areas of the site for vegetation removal and would not consist of heavy machinery. The Substation Transformer Bank Upgrade project is located 1,000 feet or less from the MEISR and school locations. The Substation Transformer Bank Upgrade project proposes to replace two existing electrical transformers and install a spare transformer at a substation located on the WOB property. Because this cumulative project would entail construction to add new transformers within the substation and because the proposed project would require deenergizing of cable circuits, construction of the proposed project would not occur simultaneously with this project. The MEIW location is located within the Airport area east of U.S. 101 and therefore portions of the 12-Kilovolt Cable Replacement project, Advanced Water Treatment System Upgrade project, and the SFO RADP could be within 1,000 feet of this receptor location. Proposed project construction activities in the Airport area on the east side of U.S. 101, which contains largely paved and developed lands comprising the Airport

facilities, would be limited to dewatering and cable replacement within an existing utility vault, which would not require the use of offroad equipment. Considering the lack of overlap between the proposed project's use of heavy equipment with the five projects within 1,000 feet of the proposed project's MEISRs, school receptor, and MEIWs and the distances of the five other cumulative projects from the MEISRs and MEIW, a significant cumulative impact would not occur. In addition, implementation of the proposed project would not result in a considerable contribution of risks from DPM and $PM_{2.5}$.

The proposed project and cumulative projects would generate some odors during construction, but odors would be temporary as discussed under Impact AQ-4. Therefore, upon completion of construction activities, cumulative projects would not combine with the proposed project to generate substantial odors.

For these reasons, cumulative air quality impacts from the proposed project would be ***less than significant***.

E.9 Greenhouse Gas Emissions

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
9. GREENHOUSE GAS EMISSIONS. Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	☐
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	☐

Greenhouse gas (GHG) emissions and global climate change represent cumulative impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the combination of GHG emissions from past, present, and future projects have contributed and will continue to contribute to global climate change and its associated environmental impacts. For this reason, the analysis of the proposed project's impact on climate change focuses on the project's contribution to cumulatively significant GHG emissions and this section does not include an individual project-specific impact statement.

On April 20, 2022, the Bay Area Air Quality Management District adopted updated GHG CEQA thresholds.[90] These guidelines are consistent with CEQA Guidelines sections 15064.4 and 15183.5, which address the analysis and determination of significant impacts from a proposed project's GHG emissions and maintains

[90] Bay Area Air Quality Management District, *CEQA Thresholds and Guidelines Update*, https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines, accessed October 8, 2024.

the air district's previous GHG threshold that allows projects that are consistent with a GHG reduction strategy to conclude that the project's GHG impact is less than significant.

San Francisco's 2023 GHG Reduction Strategy Update[91] presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's GHG reduction strategy in compliance with the air district's guidelines and CEQA Guidelines. These GHG reduction actions have resulted in a 48 percent reduction in GHG emissions in 2022 compared to 1990 levels,[92] which far exceeds the goal of 2020 GHG emissions equaling those in 1990 set in Executive Order S-3-05[93] and the California Global Warming Solutions Act,[94] and further reductions of 48 percent compared to 1990 levels have been achieved through 2022.[95] The city has also met and exceeded the 2030 target of 40 percent reduction below 1990 levels set in the California Global Warming Solutions Act of 2016[96] and the air district's 2017 Clean Air Plan[97] more than 10 years before the target date.

San Francisco's GHG reduction goals, updated in July 2021 by ordinance 117-02,[98] are consistent with, or more aggressive than, the long-term goals established under executive orders S-3-05,[99] B-30-15,[100] B-55-18,[101] the California Global Warming Solutions Act of 2016.[102] The updated GHG ordinance demonstrates the city's commitment to continued GHG reductions by establishing targets for 2030, 2040, and 2050 and setting other critical sustainability goals. In particular, the updated ordinance sets a goal to reach net-zero sector-based GHG emissions by 2040 and sequester any residual emissions using nature-based solutions.[103] Thus, the city's GHG reduction goal is consistent with the state's long-term goal of reaching carbon neutrality by 2045. The updated GHG ordinance requires the San Francisco Department of the Environment to prepare and

[91] San Francisco Planning Department, *2023 Greenhouse Gas Reduction Strategy Update,* October 2023, https://sfplanning.org/project/greenhouse-gas-reduction-strategies, accessed October 8, 2024.
[92] San Francisco Department of the Environment, *San Francisco's 2019 Carbon Footprint*, https://sfenvironment.org/carbonfootprint, accessed October 8, 2024.
[93] Office of the Governor, Executive Order S-3-05, June 1, 2005, https://www.library.ca.gov/wp-content/uploads/GovernmentPublications/executive-order-proclamation/5129-5130.pdf, accessed October 8, 2024.
[94] California Legislative Information, Assembly Bill 32, September 27, 2006, http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf, accessed October 8, 2024.
[95] San Francisco Department of the Environment, *San Francisco's 2022 Carbon Footprint*, https://sfenvironment.org/carbonfootprint, accessed October 8, 2024.
[96] California Legislative Information, Senate Bill 32, September 8, 2016, https://leginfo.legislature.ca.gov/faces/billPdf.xhtml?bill_id=201520160SB32&version=20150SB3288CHP, accessed October 8, 2024.
[97] Bay Area Air Quality Management District, *Clean Air Plan*, September 2017, http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans, accessed October 8, 2024.
[98] San Francisco Board of Supervisors, *Ordinance No. 117-21, File No. 210563*. July 20, 2021, https://sfbos.org/sites/default/files/o0117-21.pdf, accessed October 8, 2024. San Francisco's GHG reduction goals are codified in section 902(a) of the Environment Code and include the following goals: (1) By 2030, a reduction in sector-based GHG emissions of at least 61 percent below 1990 levels; (2) by 2030, a reduction in consumption-based GHG emissions equivalent to a 40 percent reduction compared to 1990 levels; (3) by 2040, achievement of net-zero sector-based GHG emissions by reducing such emissions by at least 90 percent compared to 1990 levels and sequestering any residual emissions; and (4) by 2050, a reduction in consumption-based GHG emissions equivalent to an 80 percent reduction compared to 1990 levels.
[99] Executive Order S-3-05 sets forth a goal of an 80 percent reduction in GHG emissions by 2050. San Francisco's goal of net-zero sector-based emissions by 2040 requires a greater reduction of GHG emissions.
[100] Office of the Governor, *Executive Order B-30-15*, April 29, 2015, https://www.ca.gov/archive/gov39/2015/04/29/news18938/, accessed October 8, 2024. Executive Order B-30-15 sets a state GHG emissions reduction goal of 40 percent below 1990 levels by 2030. San Francisco's 2030 sector-based GHG reduction goal of 61 percent below 1990 levels requires a greater reduction of GHG emissions.
[101] Office of the Governor, *Executive Order B-55-18*, September 18, 2018, https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf Accessed: October 8, 2024. Executive Order B-55-18 establishes a statewide goal of achieving carbon neutrality as soon as possible, but no later than 2045, and achieving and maintaining net negative emissions thereafter. San Francisco's goal of net-zero sector-based emissions by 2040 is a similar goal but requires achievement of the target five years earlier.
[102] Senate Bill 32 amends California Health and Safety Code Division 25.5 (also known as the California Global Warming Solutions Act of 2006) by adding Section 38566, which directs that statewide GHG emissions be reduced by 40 percent below 1990 levels by 2030. San Francisco's 2030 sector-based GHG reduction goal of 61 percent below 1990 levels requires a greater reduction of GHG emissions.
[103] *Nature-based solutions* are those that remove remaining emissions from the atmosphere by storing them in natural systems that support soil fertility or employing other carbon farming practices.

submit to the mayor a climate action plan (CAP) by December 31, 2021. The CAP, which was released on December 8, 2021, and will be updated every five years, carries forward the efforts of the city's previous CAPs and charts a path toward meeting the GHG commitments of the Paris Agreement (e.g., limit global warming to 1.5 degrees Celsius) as well as the reduction targets adopted in the GHG ordinance.

SFO has implemented strategies that support the City's climate change initiatives.[104] In 2023, the Airport developed a five-year strategic plan, which established the following six sustainability goals for the years 2023–2028:

(1) Adopt a resilience capital plan and program.

(2) Inspire the public and industry partners to take bold climate actions.

(3) Achieve net-zero carbon for airport-controlled emissions by 2030 and establish a stakeholder emission reduction target and implementation plan by 2024.

(4) Reach net-zero energy by 2030 by accelerating distributed energy resources and electrical grid modernization and optimizing the performance of assets across their life cycle.

(5) Become a zero-waste campus for airport-controlled municipal solid waste and construction waste.

(6) Be a net-zero water campus by achieving balance between water consumption and measures that conserve, replenish, and recycle water by 2030.[105]

The Airport continues to reduce emissions on its journey to net-zero carbon by 2030. In fiscal year 2023, SFO reduced the GHG emissions from Airport-controlled operations by 38 percent below the 1990 emissions levels, compared to the target of reducing emissions 50 percent below 1990 emissions levels. The Airport achieved these reductions by, among other things, installing electric vehicle infrastructure, installing electric ground support equipment infrastructure, and supporting airline use of sustainable aviation fuel. Moreover, SFO is developing and implementing plans to achieve up to a 95 percent reduction in GHG emissions below 1990 levels.[106]

In summary, the CEQA Guidelines and air district–adopted GHG thresholds allow projects consistent with an adopted GHG reduction strategy to determine a less-than-significant GHG impact. San Francisco has a GHG reduction strategy that is consistent with near- and long-term state and regional GHG reduction goals and is effective because the City has demonstrated its ability to meet state and regional GHG goals in advance of target dates. Therefore, projects that are consistent with San Francisco's GHG reduction strategy would not result in GHG emissions that would have a significant effect on the environment, and would not conflict with state, regional, or local GHG reduction plans and regulations.

[104] San Francisco Airport Commission, *Climate Action Plan: Fiscal Year 2021*, https://sustainability.flysfo.com/wp-content/uploads/2023/03/SFO_Climate_Action_Plan_FY21_final.pdf, accessed October 8, 2024.
[105] San Francisco Airport Commission, *Inspiring the Extraordinary, San Francisco International Airport Strategic Plan 2023–2028*, https://www.flysfo.com/sites/default/files/2023-11/SFO_StratPlan_Doc_Approved_231107_4Web.pdf, accessed October 8, 2024.
[106] San Francisco Airport Commission, *2023 Zero Annual Report*, https://sustainability.flysfo.com/wp-content/uploads/2024/04/Zero-Annual-Report-2023.pdf, accessed October 8, 2024.

Impact C-GG-1: The proposed project would generate greenhouse gas emissions, but not at levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions. ***(Less than Significant)***

The proposed project would involve the replacement of existing electrical infrastructure on the project site and associated access improvements. The project would result in a minor intensification of the use of the project site through the construction of new access roads and access pads but would not increase the use of electricity (energy sources) or other sources of GHG emissions (e.g., waste) during operations. In addition, the proposed project would not increase operational activity relative to existing conditions, and it would not generate any new employees; operation and maintenance would be performed by existing SFO staff. Therefore, the proposed project would not contribute to long-term increases in GHG emissions.

Construction activities would result in temporary increases in GHG emissions from the use of combustion equipment and vehicles, transportation of workers and equipment, and waste disposal. Thus, the proposed project would contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction. Direct effects from proposed project construction include the GHG emissions from vehicle trips and construction equipment. Indirect effects include the GHG emissions from electricity providers, including the generation of the energy required to pump, treat, and convey water; other GHG emissions are associated with waste removal, waste disposal, and landfill operations.

The proposed project would be subject to regulations adopted to reduce GHG emissions as identified in the GHG reduction strategy and demonstrated in the GHG checklist completed for the proposed project.[107] As discussed below, compliance with the applicable regulations would reduce the proposed project's GHG emissions related to on-road vehicle travel, off-road equipment use, and waste disposal.

Construction equipment would be required to meet several requirements, including idling restrictions and the conditions of an onsite maintenance program to reduce emissions from equipment that would be in frequent use.[108] The construction fleet—both on-road vehicles and off-road equipment—may also use biodiesel or renewable diesel, provided that the use of such fuels is demonstrated to reduce criteria air pollutant emissions and GHG emissions compared to conventional fuel. Furthermore, the construction contractors would be required to use electric equipment where feasible in compliance with SFO's ASCMs Division 01 57 00. Electric equipment could include welding machines, pumps, and portable equipment.

The proposed project's waste-related emissions would be reduced through compliance with the City's Recycling and Composting Ordinance, Construction and Demolition Debris Recovery Ordinance, and Construction and Demolition Debris Recycling Requirements. In addition, SFO's ASCMs Division 01 35 43.07 requires the contractor to develop and implement a construction and demolition debris management plan to comply with the debris and waste management requirements of the City and County of San Francisco and SFO and the construction and demolition diversion requirements of the California Green Building Standards Code.[109] This standard construction measure also requires source reduction and onsite reuse and recycling of materials. Together, these regulations reduce the amount of materials sent to a landfill, reducing GHGs

[107] San Francisco Planning Department, *Greenhouse Gas Analysis: Compliance Checklist for the 12 kV Power Distribution Replacement Project (Case No. 2024-005910ENV)*, January 9, 2025.
[108] San Francisco International Airport, Airport Standard Construction Measures, Continued Division 01 – General Requirements: Temporary Controls (01 57 00).
[109] San Francisco International Airport, Airport Standard Construction Measures, Division 01 – General Requirements: Recovery, Reuse, and Recycling Requirements (01 35 43.07).

emitted by landfill operations. These regulations also promote the reuse of materials, conserving their embodied energy[110] and reducing the energy required to produce new materials.

In addition, the proposed project would comply with other applicable regulations that would reduce the project's GHG emissions related to energy use and waste disposal. As discussed above, these regulations have proved effective, as San Francisco has reduced its GHG emissions by 41 percent below 1990 levels, far surpassing statewide and regional 2020 GHG reduction targets. Furthermore, the City's GHG emission reductions in 2019 also met statewide and regional 2030 targets more than 10 years in advance of the target year, and further reductions were achieved through 2022. Therefore, because the proposed project would be subject to regulations adopted to reduce GHG emissions, it would be consistent with San Francisco's GHG reduction strategy and would not generate significant GHG emissions or conflict with state, regional, and local GHG reduction plans and regulations.

Because the proposed project would be consistent with the City's GHG reduction strategy and the air district's performance criteria related to GHGs, it would also be consistent with the GHG reduction goals of executive orders S-3-05, B-30-15, B-55-18, the California Global Warming Solutions Act of 2016, and the clean air plan, and would not conflict with these plans. As such, the proposed project's impact with respect to GHG emissions would be ***less than significant***, and no mitigation would be required.

E.10 Wind

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
10.WIND. Would the project:					
a) Create wind hazards in publicly accessible areas of substantial pedestrian use?	☐	☐	☐	☒	☐

Impact WI-1: The proposed project would not create wind hazards in publicly accessible areas of substantial pedestrian use. ***(No Impact)***

A project's wind impacts are directly related to its height, orientation, design, location, and surrounding development context. Based on numerous wind analyses in San Francisco and environs, a building that does not exceed a height of 85 feet generally has little potential to cause substantial changes to ground-level wind conditions. The proposed project primarily involves replacement of belowground infrastructure such as distribution lines. The aboveground project components include construction of access roads and five access pads. Manhole lids would be raised up to 33 inches to match the finished grade of each new access pad. The

[110] *Embodied energy* is the total energy required for the extraction, processing, manufacture, and delivery of construction materials to the construction site.

proposed project would not create wind hazards because these components would not be tall enough to block or redirect wind. Therefore, ***no impact*** would occur.

Impact C-WI-1: The proposed project in combination with cumulative projects would not result in a significant cumulative wind impact. ***(No Impact)***

As discussed in Impact WI-1, the proposed project would not alter wind by blocking or redirecting wind in a way that could create wind hazards in any publicly accessible areas. Therefore, the proposed project would not contribute to any potential cumulative impact associated with wind, and ***no impact*** would occur.

E.11 Shadow

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
11. SHADOW. Would the project:					
a) Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces?	☐	☐	☐	☒	☐

Impact SH-1: The proposed project would not create new shadow in a manner that would substantially and adversely affect the use and enjoyment of publicly accessible open spaces. ***(No Impact)***

The threshold for determining the significance of impacts under CEQA is whether a project would create new shadow in a manner that would substantially and adversely affect the use and enjoyment of outdoor publicly accessible open spaces. In addition, the CEQA analysis of shadow impacts accounts for the usage of the open space; time(s) of day and year of project shadow; physical layout of the facilities affected; intensity, size, shape, and location of the shadow; and proportion of open space affected.

The proposed project would not include any new buildings or structures that would be tall enough to cast shadows on nearby publicly accessible open spaces. The closest publicly accessible open space to the project site is Lions Park in the city of San Bruno. Manhole lids would be raised up to 33 inches to match the finished grade of each new access pad, a height that would not cast shadow on any portion of Lions Park, which is located more than 400 feet from the closest manhole (Manhole PD-B500). Therefore, ***no impact*** would occur.

Impact C-SH-1: The proposed project in combination with cumulative projects would not result in a significant cumulative shadow impact. ***(No Impact)***

As discussed in Impact SH-1, the proposed project would not create new shadow in a manner that would substantially and adversely affect the use and enjoyment of publicly accessible open spaces. Therefore, the proposed project would not contribute to any potential cumulative impact associated with shadow, and ***no impact*** would occur.

E.12 Recreation

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
12. RECREATION. Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☒	☐	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒	☐

The project site is located entirely within the Airport's boundaries and does not contain any neighborhood or regional parks. Parks near the project site include Seventh Avenue Park, Lions Park, and Lomita Park, which are located in San Bruno along the western boundary of the project site. The Bay Trail Gap Closure Implementation Plan identifies and evaluates segments of the San Francisco Bay Trail (Bay Trail) and connector trails that are currently missing, to prioritize their design and construction as the full build-out of the Bay Trail is implemented. Currently, the Bay Trail ends north of the project site, at San Bruno Avenue East, and resumes south of the project site, at SFO Bayfront Park, located east of US 101. The Metropolitan Transportation Commission is currently exploring potential alignments for closing Bay Trail gaps throughout the bay area, including this section.

Impact RE-1: The proposed project would not result in a substantial increase in the use of existing neighborhood and regional parks and recreation facilities such that substantial physical deterioration or degradation of recreational facilities would occur or be accelerated. ***(Less than Significant)***

The proposed project would involve removing and replacing electrical cables within an existing 12 kV underground utility duct bank and completing associated access improvements. The proposed project does not include residential or other land uses that would increase the use of existing recreational facilities in the project area. Construction of the proposed project could result in a temporary increase in the use of existing recreational facilities as a result of onsite construction workers. However, a maximum of 26 construction

workers would be onsite during any given project construction phase, with the maximum number of workers being present during the access road installation and access pad installation phases. As discussed in Section E.3, Population and Housing, construction of the proposed project would not induce substantial population growth which could increase the use of the existing parks or other recreational facilities such that physical deterioration of the facilities would occur or be accelerated. Furthermore, construction would be temporary and the proposed project would not result in a permanent increase in the number of Airport employees, as operation and maintenance would be performed by existing SFO staff. Therefore, the proposed project would not result in the increased use or physical deterioration of other recreational facilities, and this impact would be ***less than significant***.

Impact RE-2: The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. ***(No Impact)***

The proposed project would involve removing and replacing electrical cables within an existing underground utility duct bank and completing associated access improvements. The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities that may have an adverse physical effect on the environment. Therefore, the proposed project would have ***no impact*** related to the construction or expansion of recreational facilities.

Impact C-RE-1: The proposed project in combination with cumulative projects would not result in a significant cumulative impact on recreational facilities. ***(Less than Significant)***

The geographic context for the analysis of potential cumulative impacts related to recreation consists of the conservation, development, and infrastructure projects located within 0.25 mile of the project site. Those projects are listed in Table 7, p. 23, and mapped on Figure 11, p. 26. Cumulative projects east of U.S. 101 would not include residential uses and the workforce associated with these projects would be less likely to cross U.S. 101 to use recreational resources in San Bruno. Cumulative projects west of U.S. 101 could result in an increase in the use of Seventh Avenue Park, Lions Park, and Lomita Park in San Bruno, but none of the cumulative projects include residential uses.

As discussed under Impact RE-1, the proposed project does not include residential uses that would increase the use of existing neighborhood and regional parks or recreational facilities in the area. The incremental increase in the number of employees during construction of the proposed project could generate additional passive demand for neighborhood parks and recreational facilities. However, this demand would be temporary. Therefore, the proposed project would not create a substantial increase in the use of existing neighborhood or regional recreational facilities such that physical deterioration or degradation of existing facilities would occur, nor would it result in the need to expand or construct recreational facilities.

Neither the cumulative projects nor the proposed project includes residential or other land uses that would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of those facilities would occur or be accelerated. The proposed project and the cumulative projects also do not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Furthermore, the surrounding City of San Bruno reassesses its inventory of parks, open space, and recreational facilities to ensure that the needs of all residents are met. The City of San Bruno identifies new or expanded parks or facilities to meet desired service ratios based on regional growth projections, and the development of new or expanded facilities would be subject to environmental review pursuant to CEQA.

Therefore, recreational impacts from the cumulative projects would not combine with recreational impacts from the proposed project to result in a significant cumulative impact related to recreation, and this impact would be ***less than significant***.

E.13 Utilities and Service Systems

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
13. UTILITIES AND SERVICE SYSTEMS. Would the project:					
a) Require or result in the relocation or construction of new or expanded, water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐	☐
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 inadequate 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?	☐	☐	☒	☐	☐

Proposed project construction would entail minimal amounts of water usage and operation of the proposed project would not entail any water usage. Therefore, topic 13(b) is not applicable to the proposed project and is not discussed below.

Impact UT-1: The proposed project would not require or result in the relocation or construction of new or expanded, water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. ***(Less than Significant)***

The proposed project includes the replacement of existing electric power equipment in underground utility duct banks, but otherwise does not include excavation or subsurface work that could affect underground utilities. The electrical vaults/manholes would be dewatered during construction, but as discussed under Impact UT-2 below, adequate wastewater treatment would be available. One circuit at a time would be deenergized during construction to retain electric power to the Airport's terminals and support buildings. The proposed project would also expand existing and create new gravel access roads by placing approximately 0.9 mile of graded fill on top of existing grade. The environmental effects of constructing the replacement electric power equipment are discussed in this initial study. Therefore, construction of the proposed project would not require or result in the relocation or construction of new utility facilities, the construction or relocation of which could cause significant environmental effects beyond those discussed in this document. This impact would be ***less than significant***.

Impact UT-2: The proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. ***(Less than Significant)***

Wastewater generated at Airport facilities is pumped to the Mel Leong Treatment Plant (MLTP) for treatment before being discharged to San Francisco Bay. The MLTP includes a collection system and treats sanitary wastewater from aircraft and Airport terminal restrooms, hangars, restaurants, and shops. The MLTP includes a separate collection system for treatment of industrial wastewater from maintenance shops and vehicle washing, as well as first-flush stormwater runoff from industrial areas.

The MLTP is permitted to treat 1.2 million gallons per day (mgd) average dry-weather flow of sanitary wastewater, with a hydraulic design capacity of 2.2 mgd. The MLTP is also permitted to treat 1.2 mgd average dry-weather flow of industrial wastewater, with a design flow of 1.2 mgd. In 2019, the MLTP treated average daily flows of 0.74 mgd of sanitary wastewater and 0.51 mgd of industrial wastewater; the highest reported average daily flow at the MLTP for combined sanitary and industrial wastewater was 2.3 mgd.[111] The MLTP has generally operated in compliance with its current NPDES permit since issuance of the order in 2018, with only four sanitary wastewater violations occurring between 2019 and 2022.[112]

Construction

The proposed project would dewater electrical vaults/manholes during construction. The water would be pumped into 2,000-gallon water trucks, tested, and disposed of offsite. Any water encountered at Substation BA would be dewatered and placed in water tanks staged along the existing access road to the substation. Proposed offsite disposal locations from the WOB portion of the project site would occur within SFO property at the MLTP, or at the nearest storm drain owned by a neighboring city in coordination with that

[111] Mel Leong Treatment Plant–Annual Report 2019, NPDES Permit Number CA0038318, California Regional Water Quality Control Board Order Number R2-2018-0045.
[112] California Integrated Water Quality System Project, Facility At-A-Glance Report for SF Airport Mel Leong Treatment Plant–Sanitary Waste, accessed September 27, 2024.

city. During the three years of construction, work periods would extend from March to October each year. The dewatered groundwater would be generated primarily during the dry season, groundwater dewatering would be temporary, and the MLTP's average daily flows are below design and permit capacity. In addition, the MLTP generally has met permit requirements. Therefore, project construction would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. This impact would be ***less than significant***.

Operation

During project operation, SFO staff would dewater manholes during inspections conducted every two years. The same dewatering procedure as described for construction (including pumping to tanks, testing, and disposing of water offsite) would occur during operation. Because of the available capacity at the MLTP and the low frequency of dewatering, project operation would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. This impact would be ***less than significant***.

Impact UT-3: The proposed project would not 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, and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. *(Less than Significant)*

As specified in the SFO Rules and Regulations, effective January 1, 2024, SFO has a goal to become a zero-waste campus for Airport-controlled municipal solid waste and construction waste. *Zero waste* is defined as diversion of at least 90 percent of waste from landfills and incinerators using methods like recycling and composting.[113] In 2023, SFO diverted approximately 67 percent of its solid waste from the landfill.[114]

Construction

Construction and demolition debris generated at the Airport (excluding clean tested construction debris as described below) is collected and transported to the Altamont Landfill and Resource Recovery Facility in the city of Livermore. This landfill has a permitted peak maximum disposal capacity of 11,150 tons per day. The landfill's total permitted capacity is 124,400,000 cubic yards. The remaining capacity is approximately 65,400,000 cubic yards. The Altamont Landfill is expected to remain operational until at least 2070.[115]

For construction and demolition debris, SFO also complies with Chapter 7, Municipal Green Building Requirements, of the San Francisco Environment Code by implementing SFO's ASCMs, Division 01 35 43.07, Recovery, Reuse, and Recycling Requirements. This standard construction measure requires contractors to develop and implement a construction and demolition debris management plan, separate source materials,

[113] San Francisco International Airport, *Rules and Regulations*, adopted November 7, 2023, effective January 1, 2024, issued by the Airport Commission, City and County of San Francisco, https://www.flysfo.com/about/airport-operations/policies-regulations/rules-and-regulations, accessed October 7, 2024.
[114] San Francisco International Airport, *2023 Zero Annual Report*, https://sustainability.flysfo.com/wp-content/uploads/2024/04/Zero-Annual-Report-2023.pdf, accessed October 7, 2024.
[115] California Department of Resources Recycling and Recovery, SWIS Facility/Site Activity Details, Altamont Landfill & Resource Recovery (01-AA-0009), https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/7?siteID=7, accessed June 6, 2024.

and divert at least 75 percent of their construction and demolition waste material. The San Francisco Department of the Environment tracks compliance with this measure through contractor submittals for all SFO construction projects.[116]

Proposed project construction would not require excavation or building demolition but would remove an approximately 1.5-mile-long set of 12 kV cables. Electric cables are generally made of copper, which is recyclable. Accordingly, clean tested construction debris is collected and transported to the Recology of the Coast facility in the city of Pacifica in accordance with construction and demolition debris management plans developed by contractors and the facility's requirements.

Any removed equipment that is not recyclable would be disposed of as construction/demolition debris at the Altamont Landfill. The Altamont Landfill is operating in compliance with the requirements of federal, state, and local solid waste regulations. With SFO's existing recycling programs and the available daily capacity of the Altamont Landfill, non-recyclable construction waste from the proposed project would not cause the landfill to exceed its remaining capacity of 65,400,000 cubic yards.

Based on these factors, the proposed project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, this impact would be ***less than significant***.

Operation

The proposed project would not alter the number of SFO employees. Operation and maintenance of the new electrical equipment would include visual and electrical testing of cables and splices every two years. Testing could generate less than 1 ton of solid waste every two years, which is substantially below the allowable total tons per day of the Altamont Landfill. With the Airport's existing recycling programs and the available daily capacity of the Altamont Landfill, non-recyclable operational waste from the proposed project would not cause the landfill to exceed its remaining capacity of 65,400,000 cubic yards. Therefore, the proposed project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, and it would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, this impact would be ***less than significant***.

Impact C-UT-1: The proposed project, in combination with cumulative projects, would not result in significant cumulative impacts related to relocation or construction of new utility facilities or wastewater treatment capacity. *(Less than Significant)*

The geographic scope for potential cumulative impacts related to utilities and service systems consists of the project area, its immediate vicinity, and the service areas of regional service and utility providers. As discussed in Impact UT-1, the proposed project would not require the relocation or construction of new utility facilities besides those included in the project. Therefore, the cumulative impacts of the construction of new utility facilities are identified in this initial study. As discussed in Impact UT-2, the proposed project

[116] San Francisco International Airport, *Zero Waste Plan*, https://www.flysfo.com/sites/default/files/media/sfo/community-environment/13259_Zero_Waste_Roadmap.pdf, accessed October 7, 2024.

would require treatment of dewatered groundwater at the MLTP during construction and every two years during operations, which represents a very small proportion of the MLTP's treatment capacity.

Other cumulative projects that could generate wastewater requiring treatment at the MLTP are the Consolidated Administration Campus Phase 2 project and the SFO Recommended Airport Development Plan (RADP). The Consolidated Administration Campus Phase 2 project would construct an approximately 338,000-square-foot office building and a 1,400-stall employee parking garage as part of an overall larger plan of development; the addendum for the Consolidated Administration Campus Phase 2 project indicated that the improvements generally comprise a consolidation and replacement of existing uses and would not substantially increase wastewater generation. The SFO RADP would accommodate an increase from 57.5 million annual passengers in 2019 to about 71 million annual passengers. As discussed in Impact UT-2, in 2019 the MLTP treated average daily flows of 0.74 mgd of sanitary wastewater and 0.51 mgd of industrial wastewater; the highest reported average daily flow at the MLTP for combined sanitary and industrial wastewater was 2.3 mgd. The MTLP is permitted to treat 1.2 mgd average dry-weather flow of sanitary wastewater, with a hydraulic design capacity of 2.2 mgd. Assuming a linear relationship between annual passengers and generation of sanitary wastewater, the amount of sanitary wastewater generated by 71 million annual passengers would be 0.91 mgd, which is below the permitted average dry-weather flow treatment capacity of the MLTP. Therefore, the proposed project in combination with other cumulative projects would not result in a significant cumulative impact related to wastewater treatment capacity. This impact would be ***less than significant***.

Impact C-UT-2: The proposed project in combination with cumulative projects would not result in a significant cumulative impact related to solid waste facilities and regulations. ***(Less than Significant)***

The Altamont Landfill could be used by the cumulative projects listed in Table 7, p. 23. Most of the cumulative projects listed in Table 7, regardless of construction date, would dispose of construction debris and other solid waste at the Altamont Landfill, which would contribute to reductions in available landfill capacity. However, like the proposed project, cumulative projects at SFO would be required to divert at least 75 percent of solid waste generated, as discussed in Impact UT-3. The cumulative project in the city of San Bruno would be subject to California's Mandatory Commercial Recycling Law and California Public Resources Code section 42649.8. The Altamont Landfill has more than 65 million cubic yards of total remaining capacity.

Given that the cumulative projects and the proposed project would be required to comply with the local and state requirements, the proposed project in combination with the cumulative projects would not result in a significant cumulative impact on landfill capacity or attainment of solid waste reduction goals. Therefore, this impact would be ***less than significant***.

E.14 Public Services

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
14. PUBLIC SERVICES. Would the project:					
a) 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 such as fire protection, police protection, schools, parks, or other public facilities?	☐	☐	☒	☐	☐

Impacts related to park or recreational facilities with implementation of the proposed project are discussed in Topic E.12, Recreation. Impacts on other public services are discussed below.

Environmental Setting

San Francisco Police Department Airport Bureau

The police department's Airport Bureau oversees approximately 181 employees who provide law enforcement and emergency services at the Airport. The police department works closely with the San Francisco International Airport Administration, San Mateo Sheriff's Office, Transportation Security Administration, Federal Aviation Administration, United States Customs and Border Patrol, Federal Bureau of Investigation, United States Secret Service, U.S. Federal Air Marshals, and other regional federal, state, and local law enforcement agencies.[117]

San Francisco Fire Department Airport Division

The fire department's Airport Division has approximately 95 employees and is responsible for providing fire protection, fire prevention, code enforcement, emergency medical services, water rescue operations, and hazardous materials abatement for the Airport. The fire department's facilities include Station #1, located at the west end of the two longest runways; Station #2, located at the intersection of the four runways that serve the Airport; and Station #3, located at the south end of the two shorter runways. The fire department also staffs four aircraft rescue firefighting vehicles, two fire engines, one fire truck, four watercraft, two paramedic units, and a command unit.[118] The Airport's SFO Medical Clinic, located in the International

[117] San Francisco Police Department, Airport: Keeping You Safe on the Fly, https://www.sanfranciscopolice.org/your-sfpd/explore-department/airport, accessed September 23, 2024.
[118] San Francisco Fire Department, About the Airport Division, https://sf-fire.org/airport-division/about-airport-division, accessed September 23, 2024.

Terminal Main Hall, provides travel medicine, urgent care, immigration physicals, and occupational health services.[119]

Approach to Analysis

The proposed project would not include new housing or new permanent employment; therefore, this analysis focuses on potential impacts related to additional demand for public services during the construction of the proposed project.

Impacts and Mitigation Measures

Impact PS-1: The proposed project would not result in substantial adverse physical impacts from 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 such as fire protection, police protection, schools, or other public facilities. ***(Less than Significant)***

As discussed in Topic E.3, Population and Housing, the proposed project would not include the construction of any new homes or businesses on the project site that would induce substantial unplanned population growth. Therefore, the project would not create any additional demand for schools or other public facilities, such as libraries.

As described above, the fire department and police department have airport bureaus that serve SFO. The proposed project could marginally increase the need for fire and emergency medical services, and possibly police services, as a result of the increased activity on the project site during construction. Incidents requiring police protection, fire protection, or emergency medical services could occur during construction of the proposed project. Responding to such incidents is routine for the police and fire departments, as construction projects are common and ongoing at the Airport. The proposed project could increase the number of service calls received from the area because eight to 26 construction workers would be onsite during any given project construction phase, with the maximum number of workers being present during the access road installation and access pad installation phases. Construction would be temporary and would not result in a permanent increase in the number of Airport employees. Therefore, the proposed project would not require the expansion or construction of new or altered fire and police service facilities at the Airport. For these reasons, the proposed project would have a ***less-than-significant*** impact on public services.

Impact C-PS-1: The proposed project in combination with cumulative projects would not result in a significant cumulative impact on public services. ***(Less than Significant)***

The geographic context for the analysis of potential cumulative impacts related to public services consists of the conservation, development, and infrastructure projects located within 0.25 mile of the project site. Those projects are listed in Table 7, p. 23, and mapped in Figure 11, p. 26.

[119] San Francisco International Airport, Medical Services: SFO Medical Clinic, https://www.flysfo.com/passengers/services-amenities/medical-services, accessed September 23, 2024.

The cumulative projects could incrementally increase the demand for public services by adding employees in the project area. However, as described under Impact PS-1, the proposed project would not permanently increase demand for fire and police services at the Airport, and the Airport's fire and police services are adequately staffed to provide appropriate emergency response during construction of the proposed project. Cumulative projects not located on Airport property do not have the same service providers; therefore, the proposed project would not combine with these cumulative projects to affect their service levels. For these reasons, the proposed project would not combine with the cumulative projects to create a significant cumulative impact on public services. This impact would be ***less than significant***.

E.15 Biological Resources

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
15. BIOLOGICAL RESOURCES. Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒	☐

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	☐

The SFO WOB property is undeveloped property west of U.S. 101 (see Figure 1, p. 2) that supports annual grassland, ornamental (primarily eucalyptus), seasonal wetland, willow riparian, and freshwater marsh plant communities. Higher elevations on the site typically support annual grassland, while lower elevations are dominated by seasonal wetlands and marshlands, with riparian corridors lining the water channels throughout the site.[120]

A 2023 aquatic resources delineation for the WOB property recorded the following acreage of each wetland and water type on the greater WOB property:[121]

- 23.805 acres of freshwater emergent marsh
- 7.990 acres of seasonal wetland
- 1.833 acres of forested (willow) wetland
- 0.481 acre of ditches
- 6.055 acres of canal
- 0.065 acre of culverted waters
- 0.005 acre of pond

The project area for the 12 kV line includes annual grassland, freshwater marsh, and disturbed lands. The annual grassland is not a sensitive community and contains non-native grasses and invasive herbaceous species including ripgut brome (*Bromus diandrus*), wild oat (*Avena fatua*), common velvet grass (*Holcus lanatus*), Italian rye grass (*Festuca perennis*), soft brome (*Bromus hordeaceus*), seaside barley (*Hordeum murinum* var. *leporinum*), black mustard (*Brassica nigra*), crane's bill geranium (*Geranium molle*), filaree (*Erodium botrys*), yellow star thistle (*Centaurea solstitialis*), and Italian thistle (*Carduus pycnocephalus*).[122] Shrubs such as toyon (*Heteromeles arbutifolia*) and coyote brush (*Baccharis pilularis*) are interspersed, and large stands of Himalayan blackberry (*Rubus armeniacus*) are present throughout the property. The marsh habitat is dominated by cattail (*Typha latifolia*), with hardstem bulrush (*Schoenoplectus acutus*), tall flatsedge (*Cyperus eragrostis*), fat-hen (*Atriplex prostrata*), curly dock (*Rumex crispus*), and poison hemlock (*Conium maculatum*), as well as arroyo willow (*Salix lasiolepis*) and Himalayan blackberry on the banks. Disturbed lands are primarily non-vegetated areas, including bare ground and gravel roadways.

[120] San Francisco Planning Department, *Mitigated Negative Declaration for San Francisco Garter Snake Recovery Action Plan (RAP)*, Case No. 2008.0498EE, September 9, 2008.
[121] Environmental Science Associates, *SFO West of Bayshore Property Aquatic Resources Delineation Report*, May 2023.
[122] Environmental Science Associates, *SFO West of Bayshore Property Aquatic Resources Delineation Report*, May 2023.

The WOB property supports the federal and state-listed endangered and state fully-protected San Francisco garter snake (SFGS) (*Thamnophis sirtalis tetrataenia*) and federally listed threatened California red-legged frog (CRLF) (*Rana draytonii*), which are aquatic species that are found primarily in the channels and freshwater marsh, but make extensive use of grasslands and disturbed lands. The *2019–2029 San Francisco Garter Snake Recovery Action Plan*, or 2019 RAP, was written for protection of these species in the WOB area.[123]

Other wildlife species that have been documented at the WOB property include western yellow-bellied racer (*Coluber constrictor mormon*), gopher snake (*Pituophis melanoleucus*), rough-skinned newt (*Taricha granulosa*), western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Elgaria multicarinata*), Botta's pocket gopher (*Thomomys bottae*), striped skunk (*Mephitis mephitis*), and coyote (*Canus latrans*). Numerous migratory birds nest, winter, or forage at the site including Resident Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), American coot (*Fulica americana*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), Wilson's snipe (*Gallinago delicata*), black phoebe (*Sayornis nigricans*), song sparrow (*Melospiza melodia*), red-winged blackbird (*Agelaius phoeniceus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), killdeer (*Charadrius vociferus*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), barn swallow (*Hirundo rustica*), European starling (*Sturnus vulgaris*), northern mockingbird (*Mimus polyglottis*), western meadowlark (*Sturnella neglecta*), and house finch (*Carpodacus mexicanus*), among others.[124] Habitat for several special-status bats occurs in association with large eucalyptus trees on the WOB property. Eucalyptus bark and tree cavities may provide habitat for pallid bat (*Antrozous pallidus*), hoary bat (*Lasiurus cinereus*), Fringed myotis (*Myotis thysanodes*), and Yuma myotis (*Myotis yumanensis*); however, roosting habitat for these species was not identified in or adjacent to the 12 kV project site.

Proposed project activities in the Airport area on the east side of U.S. 101, which contains largely paved and developed lands comprising the Airport facilities, would be limited to cable replacement within an existing utility vault; therefore, no impacts on biological resources would occur in this area. The analysis below pertains to potential impacts on biological resources on the WOB property portion of the project site.

Impact BI-1: The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. *(Less than Significant with Mitigation)*

Biological resources on the WOB property are well characterized, owing to decades of focused wildlife surveys that have been performed by SFO. No special-status plant species have been observed on the site,

[123] San Francisco Planning Department, *Addendum to Mitigated Negative Declaration San Francisco Garter Snake Recovery Action Plan 2019 to 2029*, Case No.: 2008.0498ENA, 2020.
[124] San Francisco Planning Department, *Mitigated Negative Declaration for San Francisco Garter Snake Recovery Action Plan (RAP),* Case No. 2008.0498EE, September 9, 2008.

nor are any expected to occur, given the site's history of disturbance and prevalence of non-native plants. Hence, ***no impact*** would occur related to special-status plants.[125]

Special-status animal species that may occur on the WOB property are Crotch's bumble bee (*Bombus crotchii*), a state candidate for listing; SFGS and CRLF, northern harrier (*Circus cyaneus*), a California Species of Special Concern, white-tailed kite (*Elanus leucurus*), a California Fully Protected species, and protected bats.[126] [127] [128] [129] In addition, non-special-status migratory birds protected by the Migratory Bird Treaty Act frequently nest on the site.

Crotch's bumble bee burrows in grasslands and upland scrub that contain suitable forage plants. The annual grasslands on WOB property with disturbed soil and leaf litter may provide suitable habitat for this species; however, the likelihood of encountering this species is considered low. The nearest documented sighting is located 16 miles to the south near the city of Palo Alto from 1960. If Crotch's bumble bees are present at the time of construction, the movement of equipment, vegetation trimming, or earthmoving activities may injure or kill bees, which would be a significant impact. The implementation of **Mitigation Measure M-BI-1a** would reduce this potential impact to a ***less-than-significant*** level.

SFGS and CRLF are known to occur throughout the WOB property and are known from the immediate project area. These species, particularly SFGS, may extensively use underground small-mammal burrows. They may also bask upon and traverse project access roads. Project construction activities are planned to avoid all take of SFGS and CRLF individuals. A small amount of SFGS and CRLF habitat would be permanently removed during project construction. Approximately 0.055 acre of freshwater marsh would be filled to construct access pads for Manholes PD-B503 and PD-B504 (see below under criterion c). In addition, approximately 1.5 acres of annual grassland area, which provides SFGS and CRLF upland habitat, would be permanently affected by the installation of new roads and access pads. Staging areas and access roads may temporarily affect additional grassland habitat. Impacts on grassland habitat are considered less than significant

[125] The phrase "special-status species" is term of art used by the scientific community to describe plant and wildlife species that are considered sufficiently rare that they require special consideration and/or protection and should be, or have been, listed as rare, threatened or endangered by the federal and/or State governments. For the purposes of this document, the term special-status species includes the following:

1) Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (FESA) (50 Code of Federal regulations [CFR] 17.12 [listed plants], 17.11 [listed animals] and various notices in the Federal Register [FR] [proposed species]);
2) Species that are candidates for possible future listing as threatened or endangered under the federal Endangered Species Act (61 FR 40, February 28, 1996);
3) Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] 670.5);
4) Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.);
5) Species designated by CDFW as species of special concern;
6) Animals fully protected under Fish and Game Code (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);
7) Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as "rare or endangered" even if not on one of the official lists (State CEQA Guidelines, Section 15380); and
8) Raptors (birds of prey), which are specifically protected by California Fish and Game Code Section 3503.5, thus prohibiting the take, possession, or killing of raptors and owls, their nests, and their eggs;
9) Plants considered under the CDFW and CNPS to be "rare, threatened or endangered in California" (California Rare Plant Rank [CRPR] 1A, 1B, and 2).

[126] California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) RareFind version 5 query of the San Francisco South and surrounding U.S. Geological Survey 7.5-minute topographic quadrangles, Commercial Version, 2024.
[127] U.S. Fish and Wildlife Service, Information for Planning and Conservation (IPaC) Species List, http://ipac.ecos.gov, September 2024.
[128] California Native Plant Society, Inventory of Rare and Endangered Plants, San Francisco South and surrounding U.S. Geological Survey 7.5-minute topographic quadrangles, http://www.rareplants.cnps.org/, 2024.
[129] San Francisco Planning Department, *Addendum to Mitigated Negative Declaration San Francisco Garter Snake Recovery Action Plan 2019 to 2029*, Case No. 2008.0498ENA, 2020.

because this is not a sensitive natural community and impacts would occur in a small area, relative to the large amount of grassland and seasonal wetland upland habitat areas in the WOB area.

SFGS and CRLF may be subject to harm, injury or mortality from interactions with vehicles, machinery, and construction traffic on project access roads, or from accidental encounters with equipment during the installation of new access pads. The use of vehicles and construction equipment during road building and clearing activities would be subject to the protective measures listed in **Mitigation Measure M-BI-1b** to prevent harm to SFGS and CRLF individuals. These measures were adapted from the 2019 RAP, based on existing measures that minimize SFGS and CRLF impacts during annual WOB maintenance actions. Specifically, these measures prevent workers from encroaching into adjacent sensitive habitats, provide environmental training for work crews, and require full-time biological monitoring and vehicle escorts by an approved biologist. The implementation of Mitigation Measure M-BI-1b would reduce this potential impact to a ***less-than-significant*** level.

Native birds and their nests are protected under the federal Migratory Bird Treaty Act and California Fish and Game Code section 3513. Annual grasslands, seasonal wetlands, and other habitats on the WOB property provide suitable nesting and foraging habitat for various bird species. If any migratory birds are nesting near project activities, including road work and access pad construction, they could be harmed by the removal of trees or vegetation, or disturbed by construction or cable pulling, potentially leading to reduced fecundity of young or nest abandonment. This would result in a significant impact. The implementation of **Mitigation Measure M-BI-1c** would reduce this potential impact to a ***less-than-significant*** level.

Bat species are protected under California Fish and Game Code and under CEQA. Bats may roost overnight or over-winter to the WOB property, including within cavities in mature trees or in folds or crevices of loose tree bark. While mature eucalyptus in the WOB property provide suitable bat habitat, none of these trees are located in or adjacent to the access roads or work areas for this project. Thus, ***no impact*** is anticipated to roosting bats.

> **Mitigation Measure M-BI-1a: Crotch's Bumble Bee Protection Measures.** No more than 30 days prior to construction, a qualified biologist with expertise in bees shall conduct a Crotch's bumble bee survey in suitable nesting, foraging, and overwintering habitat areas that may be impacted by project construction, and areas within 100 feet. A minimum of three surveys shall be conducted over a three-day period within a temperature range of 15°C and 30°C between March 1 and October 31 following the guidance outlined in the California Bumble Bee Atlas.[130,131] If an active nest is identified, a 45-foot no-disturbance buffer shall be established to reduce the risk of accidental take. If a no-disturbance buffer cannot be maintained, SFO shall seek take coverage for this species under the California Endangered Species Act.
>
> **Mitigation Measure M-BI-1b: San Francisco Garter Snake and California Red-Legged Frog Protection Measures.** The following measures shall be implemented for the proposed project:
>
> a. *Environmental Awareness Training.* An approved [typically U.S. Fish and Wildlife Service– or California Department of Fish and Wildlife–approved] biologist shall present environmental awareness training to all employees before the start of work. The training shall include basic

[130] California Bumble Bee Atlas, Survey Protocols, https://www.cabumblebeeatlas.org/habitat-surveys.html.
[131] Note that the Crotch's bumble bee survey window presented here is wider than the peak flying time for this species, March to June. This broad survey window provides flexibility to implement the 12 kV project later in the year in the face of other site limitations such as SFGS activity periods.

identification of SFGS and CRLF and a brief overview of each species' life history and preferred habitats. Biologists also shall review the biological protection measures for the project. Workers shall be given a handout detailing the above information with photos of both species for identification. After the training, employees shall sign a training sign-in sheet to confirm that they understand the materials covered and the penalties for noncompliance.

b. *Work Windows and Hours.* The general construction work period shall be August 15–November 1 in wetlands and March 1–October 31 in uplands. Hand-clearing of vegetation from work areas may occur year-round.

c. *Property Access.* All entry gates to the WOB property shall be locked and access-restricted at all times and gates used for project-related access shall be locked during non-work hours. Signage on security fencing around entirety of property as an "Environmentally Sensitive Area" shall be maintained. All gates must be closed after entering or leaving the property. Motorized vehicles shall not exceed 5 miles per hour. All motorized vehicles shall be escorted whenever possible by a person walking in front of the vehicle and checking the route of travel for SFGS and CRLF.

d. *Fire Prevention/General Safety.* All vehicles entering the site shall carry a functional fire extinguisher. No smoking, firearms (other than firearms carried by authorized security personnel), campfires, or pets of project personnel shall be allowed anywhere on the WOB property.

e. *Pre-activity Meeting.* A pre-activity meeting shall be held immediately before the initiation of work for all persons directly involved with implementation of the proposed activities on the WOB property. All conditions included in regulatory permits shall be reviewed and discussed. As part of the pre-activity meeting, a site visit shall be held to address and clarify any site-specific issues pertaining to activity implementation. A chain of command for field crews and other onsite personnel shall be established before the commencement of all activities.

f. *Biological Monitoring.* For specific activities occurring on the WOB property, biological monitoring and preconstruction clearance surveys (described below) shall be required to ensure that adverse effects on SFGS and CRLF do not occur. The need for monitoring will depend on the type, extent, intensity, and duration of proposed activities. As the project proponent, SFO shall determine an appropriate level of biological monitoring for each proposed activity to ensure the protection of SFGS and CRLF. The monitoring approach may range from limited, part-time monitoring inspections to full-time monitoring by a team of multiple approved biologists. The following procedures and practices shall be implemented on an as-needed basis as determined by SFO's approved biologist.

   - Approved biologists shall be established as the persons in charge of, and responsible for, all facets of project implementation. Approved biologists shall have full responsibility and authority for stopping work activities.
   - Approved biologists shall check for any reptiles or amphibians under any parked vehicles and equipment.
   - To maintain safety and limit any chance of take or habitat disturbance, a simple system of hand signals shall be established for the monitors, truck drivers, equipment operators, and field personnel to use during habitat enhancement and related activities.
   - Approved biologists shall have a cellular phone during activities on the WOB property.

g. *Vegetation Removal.* Before the start of any ground-disturbing activities, ground-level vegetation that may provide cover for SFGS and CRLF shall be removed. Ground-level vegetation also will be removed from within existing roads to be used and within 3 feet of the edges of these roads before any road improvement work. The following procedures and practices shall be implemented during vegetation removal:

- Immediately before vegetation removal, an approved biologist shall visually survey the area. Vegetation shall then be cut to a height of no less than 8 inches using hand tools (including string trimmers), and loose vegetation shall be removed to increase visibility. The approved biologist shall then conduct a second visual survey to ensure that no listed species are present. The remaining vegetation shall then be removed using hand tools and biologists shall hand-excavate small-mammal burrows as necessary before allowing equipment access to work areas.
- If SFGS or CRLF are identified during vegetation clearing, burrow excavation, or other activities, they shall be allowed to leave the work area of their own accord.
- Shrub and understory vegetation removal shall be conducted using hand tools, including string trimmers and chainsaws, to minimize adverse impacts from mowers, excavators, and other heavy equipment. For larger shrubs, such as pampas grass, the vegetation around the base shall first be trimmed back, allowing an approved biologist to examine the plant and the surrounding area. Then, an excavator shall be used to remove the plant from its base, making minimal contact with the plant itself. The plant will then be shaken by its roots before being placed in the haul truck and inspected one more time by the approved biologist before removal from the site.
- An approved biologist shall be present during all vegetation removal.
- When large earthmoving equipment is in use, four biological monitors shall be present onsite for each piece of equipment.
- All vegetation cleared from the site shall be loaded into trucks or containers and removed from the site the same day. All biomass generated from vegetation removal shall be placed directly into haul trucks; no stockpiling shall be permitted.

h. *Wildlife Exclusion Fence.* The contractor shall install temporary wildlife exclusion fencing along the perimeter of work areas. Fencing shall be free of plastic or synthetic monofilament netting to avoid entanglement, trapping, or injury of SFGS and CRLF. Fencing shall not be trenched but instead shall be staked into the ground with loose materials piled at the base to fill any holes or gaps that SFGS may enter. Fencing should be inspected daily by the approved/designated biologist(s) to ensure it is maintained/functional and shall be repaired immediately where there are tears, gaps or damage. All construction areas not fenced, such as access roads, shall be clearly marked with flagging and monitored during construction to ensure that vehicles and equipment do not encroach into natural habitat. Any construction-related disturbance outside of these boundaries, including parking, temporary access, construction staging, or areas used for storage of materials, shall be prohibited without approval by SFO. Construction vehicles shall pass and turn around only within the delineated construction work area boundary or existing local road network. Where new access is required outside of existing roads or the construction work area, the route shall be clearly marked (i.e., flagged and/or staked) before being used, subject to review and approval of the approved biologist.

i. *Weather Forecast.* Activities involving ground disturbance (i.e., vegetation clearing and contouring) shall be limited to periods of dry weather (less than 0.25 inch of precipitation per 24-hour period and less than a 40 percent chance of rain). Ground disturbance shall not be initiated if precipitation is forecast for the San Mateo Peninsula region. Activities shall cease 24 hours before a 40 percent or greater forecast of rain from the National Weather Service. Work may continue 24 hours after the rain ceases and there is no precipitation in the 24-hour forecast.

j. *Work Area Definition.* The limits of work areas for ground-disturbing work shall be staked, flagged, or fenced to ensure that work and associated vehicle traffic are confined to designated areas.

k. *Preconstruction Clearance Survey.* Up to 24 hours before the start of vegetation clearing or any ground-disturbing activities, an approved biologist shall search ground vegetation for SFGS and CRLF using a probing stick and/or bare hands. The approved biologist shall inspect the work area before the commencement of work to ensure that no SFGS or CRLF individuals are present.

l. *Fueling of Equipment and Spill Response.* Fueling of equipment on the WOB property shall be conducted at least 65 feet from the boundary of wetland and riparian areas. Fueling shall be done using tarps or containers for spill containment. The containment tarp/container shall be set up under the equipment before refueling. Once the refueling is completed, the containment tarp/container and its contents shall be immediately removed from the property and all contaminants properly disposed of offsite. Standard operating procedures shall be implemented immediately in case of fuel spillage. All workers shall be informed of the importance of preventing spills and the appropriate measures to take should a spill occur. Spill kits shall be maintained onsite and will be immediately available in areas where refueling occurs.

m. *Trash/Debris Removal.* During project activities, all trash shall be contained and removed from the site on a daily basis. All trash and construction-related debris shall be removed from the work areas after the end of construction each day.

n. *Revegetation.* Although temporary impacts are not anticipated, after the completion of project activities, areas subject to temporary ground disturbance shall be returned to approximately pre-project grades and contours and shall be managed in accordance with SFO's comprehensive vegetation management program.[132]

o. *Decontamination.* All vehicles, materials, and equipment, including construction equipment, brought to the site shall be certified as clean, and free of dirt and debris that could introduce pathogens (e.g., Snake Fungal Disease) or invasive weed seeds. To avoid introducing new aquatic diseases to the site (e.g., Ranavirus or chytrid fungus), workers who have direct contact with water shall either use new gear or decontaminate their waders or boots with a 10 percent bleach solution prior to contact.

Mitigation Measure M-BI-1c: Nesting Bird Protection Measures. Before any work conducted from February 15 to September 15, a qualified biologist with expertise in birds shall conduct a preconstruction survey to determine whether any birds are nesting in the work area. The survey shall include baseline monitoring of the nest to characterize normal bird behavior and determine a

[132] Environmental Science Associates, *Vegetation Management Plan for the San Francisco Garter Snake Recovery Action Plan, West of Bayshore Property, San Francisco International Airport* (RMP-2023-0003-R3), 2023, approved by CDFW on February 7, 2024.

buffer distance which allows the birds to exhibit normal behavior. The preconstruction survey shall be conducted no earlier than seven days before the start of work from February 15 through May (because there is higher potential for birds to initiate nesting during this period), and no earlier than 15 days before the start of work from June through September 15. If active nests are found during the survey, the biologist shall determine an appropriately sized buffer around the nest in which no work would be allowed until the young have successfully fledged. The size of the nest buffer shall be determined by the qualified biologist, and would be based on the nesting species, its sensitivity to disturbance, and the expected types of disturbance. Considering these factors, typical nest buffers range in size from 250 feet for passerine birds, 500 feet for accipiters, and 1,000 feet for buteos. The qualified biologist shall monitor the nesting birds daily during construction activities and increase the buffer if the birds show signs of unusual or distressed behavior (e.g., defensive flights and vocalizations, standing up from a brooding position, and/or flying away from the nest). If buffer establishment is not possible, the qualified biologist shall have the authority to cease all construction work in the area until the young have fledged, and the nest is no longer active.

Impact BI-2: The proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. ***(No Impact)***

Willow riparian communities occur along portions of the WOB canals, and in the seasonal wetlands east of the San Bruno Community Gardens. These communities consist of dense stands of arroyo willow among other riparian species. Although the 12 kV line crosses this community south of the substation, the replacement line would be pulled through an existing underground pipeline. Thus, no temporary or permanent harm to any riparian or other sensitive community is anticipated from implementation of the project, and ***no impact*** would occur.

Impact BI-3: The proposed project could have a substantial adverse effect on federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. ***(Less-than-Significant Impact with Mitigation)***

Much of the 12 kV line route (see Figure 2, p. 3) passes underneath freshwater marsh and seasonal wetland communities, but construction impacts on these communities would be avoided at the substation, gravel roads, and access areas to Manholes PD-B500 through PD-B502. At Manholes PD-B503 and PD-B504, access pads measuring 30 feet by 70 feet would fill 0.055 acre of freshwater marsh, a permanent impact to an existing jurisdictional wetland (see Figure 3, p. 6). No temporary impacts on wetlands are anticipated from the proposed project. Permanent loss of wetlands would be a significant impact, but would be mitigated by **Mitigation Measure M-BI-3** below, which includes compensatory mitigation as required by CDFW, the Regional Board, or the Army Corps of Engineers With implementation of Mitigation Measure M-BI-3, the impact would be reduced to a ***less-than-significant*** level.

Mitigation Measure M-BI-3: Compensation for Fill of Wetlands. The Airport shall provide compensatory mitigation for placement of fill associated with installation of new access pads, as further determined by the regulatory agencies with authority over these features during the permitting process. At a minimum, SFO shall provide compensatory mitigation for the permanent

loss of wetlands at a 1:1 ratio (mitigation: impact), or as determined through coordination and permitting efforts with the regulatory agencies. Compensatory mitigation shall meet and be consistent with 14 CFR § 139.337, Wildlife Hazard Management, and associated FAA wildlife hazard advisory circulars. All details regarding mitigation shall be determined through coordination with the regulatory agencies that require compensatory mitigation. If onsite compensatory mitigation is proposed, these onsite activities would be authorized through existing CEQA compliance and RAP regulatory permits.

Impact BI-4: The proposed project would not 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)***

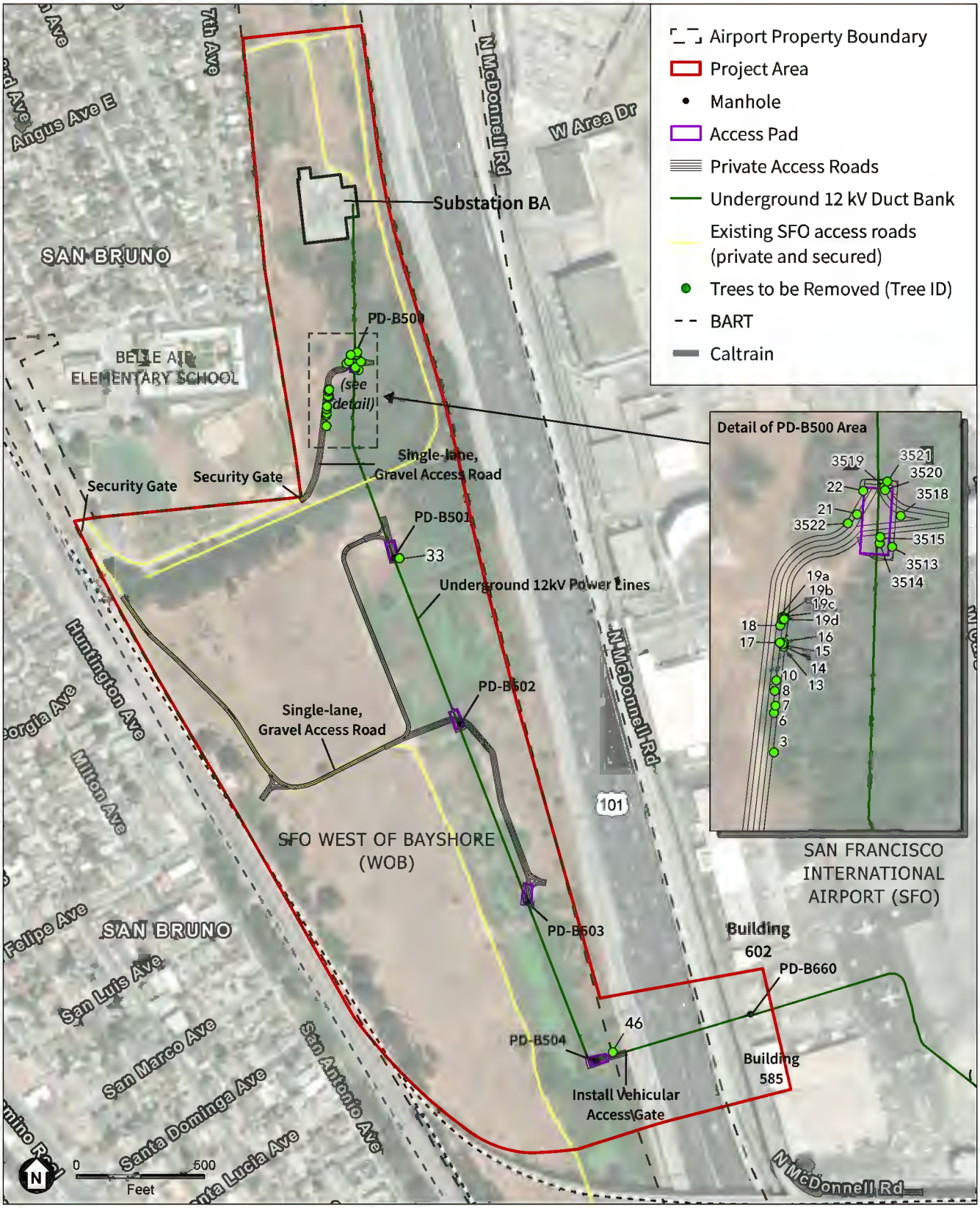
Currently, the project site serves as an isolated island of undeveloped habitat surrounded by roadways and intensive development. This habitat value would remain after completion of the project. Although the movement of small, non-migratory wildlife species may be temporarily hindered in limited areas during construction of roads and access pads, such impacts would be less than significant, given the small footprint of the roads and access pads and the ability of wildlife to bypass work areas. After construction, wildlife access would be restored, and no wildlife corridors would be permanently affected by project activities. Thus, impacts under this criterion would be ***less than significant***, with no mitigation required.

Impact BI-5: The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. ***(No Impact)***

The proposed project would not conflict with local policies or ordinances protecting biological resources. The project would avoid or minimize impacts on protected wildlife, riparian and wetland resources, in accordance with San Francisco County General Plan policies related to protecting vegetative, water, fish, and wildlife resources. As identified in **Table 21**, approximately 27 trees would be removed for installation of new roads and access pads. Of these, one tree each occurs near Manholes PD-501 and PD-506, and 25 trees occur near PD-B500 (**Figure 17**). Consistent with FAA Wildlife Hazard Management guidelines, SFO adheres to their Wildlife Hazard Management Plan, which disallows planting new trees on the Airport due to wildlife strike potential and risks to both humans in flight and birds. At the WOB property, the Airport replaces trees consistent with the WOB Vegetation Management Plan and the CDFW Restoration Management Permit requirements. In the context of CEQA, SFO is not subject to the requirements of the San Francisco Tree Ordinance. Thus, ***no impact*** related to this criterion would occur.

Table 21 Trees Identified for Removal

Tree Number	Tree ID (Conforms to Numbers in Figure 17)	Species	Size (Diameter at Breast Height in Inches, including Multiple Stems)
1	3513	Arroyo willow	1, 1, 1, 1, 3, 3.5, 7
2	3514	Arroyo willow	4
3	3515	Arroyo willow	4
4	3518	Arroyo willow	2, 2.5, 3, 3.5
5	3519	Arroyo willow	3, 4, 4
6	3520	Arroyo willow	4
7	3521	Arroyo willow	5
8	3522	Arroyo willow	2, 2, 3, 3.5
9	3	Arroyo willow	1, 1, 1, 2.5, 2.5, 2.5
10	6	Arroyo willow	3, 4, 5
11	7	Arroyo willow	3, 5, 7
12	8	Arroyo willow	10
13	10	Arroyo willow	8
14	13	Oak	3
15	14	Canyon live oak	3
16	15	Arroyo willow	2, 4.5
17	16	Canyon live oak	4
18	17	Arroyo willow	2, 3
19	18	Canyon live oak	1
20	19a	Canyon live oak	2
21	19b	Canyon live oak	2
22	19c	Canyon live oak	2
23	19d	Canyon live oak	2
24	21	Arroyo willow	1, 1, 1, 2, 2, 2, 2
25	22	Arroyo willow	1, 1, 1, 1, 1, 2, 2
26	33	Plum	3, 3
27	46	Coast live oak	2, 3, 3



SOURCE: Maxar, 2022; SFO, 2025; ESA, 2025

12kV Power Distribution Replacement Project

FIGURE 17

PROPOSED PROJECT LAYOUT AND TREES TO BE REMOVED

Impact BI-6: The proposed project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. ***(No Impact)***

There are no habitat conservation plans, natural community conservation plans, or other local, regional, or state habitat conservation plans that pertain to the project site. Thus, ***no impact*** related to this criterion would occur.

Impact C-BI-1: The proposed project in combination with cumulative projects would not result in a significant cumulative impact on biological resources. ***(Less than Significant)***

Projects considered in the cumulative impacts analysis include the SFGS RAP, a transformer bank upgrade on the grounds of PG&E Substation WOB, a hotel on El Camino Real, and several Airport projects within developed lands in the SFO facility east of U.S. 101. None of these projects are anticipated to affect biological resources in the WOB area, except implementation of the RAP. Conservation measures in the RAP were approved for protection of SFGS and CRLF and their habitats and would apply to the current project as well. Therefore, the proposed project, in combination with all identified cumulative projects, would not result in a cumulative impact on biological resources. Therefore, the impact would be ***less than significant***.

E.16 Geology and Soils

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
16. GEOLOGY AND SOILS. 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?	☐	☐	☒	☐	☐

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
c) Be located on 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒	☐

The project site is not located within an active earthquake fault zone but lies within an area susceptible to seismic shaking, liquefaction, and lateral spreading.[133] The active San Andreas Fault Zone is located about 2 miles to the southwest. The project site would be susceptible to seismic shaking and seismic-induced ground failures from earthquakes on the San Andreas Fault Zone or other active fault zones in the bay area. The project site is relatively flat and is not in an area susceptible to landslides or substantial erosion.

The soil map of the project site identifies the soil as "Urban Land," meaning that the soil has been recently placed as sediment deposited by drainage from upland areas.[134] The project site has not been evaluated for susceptibility to expansive soils. The deposition of the material in this area occurred over the last few decades at most and therefore would not contain any unique paleontological resources and would not be considered a unique geological feature.

Soil capability related to supporting the use of septic systems or alternative wastewater disposal systems is ***not applicable*** to the proposed project because septic systems or alternative waste systems are not components of the proposed project.

Impact GE-1: The proposed project would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving fault rupture, seismic ground shaking, seismically induced ground failure, or seismically induced landslides. ***(Less than Significant)***

The project site is not located within an active fault zone and does not include the injection or extraction of groundwater or crude oil. Therefore, the proposed project would not directly cause movement along a fault,

[133] California Geological Survey, EQ Zapp Website, https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed September 23, 2024.
[134] U.S. Natural Resources Conservation Service, *Soil Map—San Mateo County, Eastern Part, and San Francisco County, California*, September 12, 2023.

earthquakes, or seismic shaking. The project site is located in an area that is subject to earthquakes and seismic shaking from nearby active faults. Therefore, the proposed project could indirectly cause substantial indirect effects relative to seismic shaking, liquefaction, or lateral spreading.

The design and construction of the proposed project would be required to comply with existing building and construction specifications and regulations. The gravel access roads and gravel manhole access pads would be designed and constructed in compliance with the following design standards:

- Federal Highway Administration *Gravel Roads Construction and Maintenance Guide*[135]
- American Association of State Highway and Transportation Officials *Gravel Road Thickness Design Methods*[136]

The replacement of electric cables within the existing utility tunnels would have no direct or indirect effects related to seismic shaking or seismic-induced ground failure.

Compliance with the independently enforceable regulations and SFO standard procedures would ensure that impacts related to fault rupture, seismic ground shaking, and seismic-induced ground failure (i.e., liquefaction, lateral spreading, and landslides) would be ***less than significant***.

Impact GE-2: The proposed project would not result in substantial soil erosion or the loss of topsoil. *(Less than Significant)*

As discussed in Section A.4, Project Characteristics, the total area of ground disturbance for the gravel manhole access pads would be 10,500 square feet. The area of ground disturbance for construction of the gravel access roads would be 56,400 square feet. The combined area of ground disturbance would be 1.3 acres and would include ground disturbance activities, such as site clearing, that could contribute to substantial soil erosion or the loss of topsoil. The forces of wind or water can erode exposed soils.

During construction of the proposed project, SFO's contractors would be required to implement Airport Division Document 01 57 23 (Stormwater Pollution Prevention and Erosion and Sediment Control), which requires development and implementation of a site-specific construction stormwater pollution prevention plan (SWPPP) containing stormwater best management practices (BMPs) designed to control and reduce soil erosion, including stormwater runoff quality control measures, watering for dust control, dewatering procedures, and the placement of silt fences, straw wattles, or other BMPs, as needed. The SWPPP must include BMPs to reduce erosion and sedimentation effects. Typical measures for construction sites include erosion control or site stabilization that retains soil and sediment onsite. Stabilization and structural control practices are to be used at all construction locations. An example of such practices is the placement of fiber rolls or gravel barriers to detain small amounts of sediment from disturbed areas. See Topic B.17, Hydrology and Water Quality, for details regarding these requirements. SFO's ASCMs also include requirements for management of hazardous materials, demolition rubbish and debris, dust, and trash (Divisions 01 33 16 and 01 35 43.01).

[135] Federal Highway Administration, *Gravel Roads Construction and Maintenance Guide*, August 2015.
[136] American Association of State Highway and Transportation Officials, *Gravel Road Thickness Design Methods*, 2003.

Once constructed, the occasional maintenance activities would use the gravel access roads, would not disturb soil, and would not cause erosion or loss of topsoil.

Compliance with the independently enforceable existing requirements to control runoff would ensure that impacts related to erosion and soil loss would be ***less than significant***.

Impact GE-3: The proposed project would not be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project. ***(Less than Significant)***

Impacts related to liquefaction, lateral spreading, and landslides were previously analyzed in Impact GE-1, which concluded that the impact would be less than significant. The proposed project does not include excavation or significant dewatering activities, as dewatering would only occur within existing utility vaults and therefore would not cause conditions for subsidence or collapse. Impacts related to unstable geologic units or soil would be ***less than significant***.

Impact GE-4: The proposed project would not create substantial risks to life or property as a result of locating buildings or other features on expansive or corrosive soils. ***(Less than Significant)***

The proposed project consists of constructing new or improving existing gravel access roads, constructing gravel access pads around manholes, and replacing electrical cables inside an existing underground utility tunnel. Expansion or contraction of soil underneath the gravel access roads or gravel manhole access pads would not be expected to cause damage to the roads, and occasional maintenance would keep the roads passable. Corrosive soils, if present, would not affect gravel roads and pads. The replacement of electrical cables would occur inside an existing underground utility tunnel; expansive or corrosive soil would not affect the cables. Therefore, impacts related to expansive or corrosive soils would be ***less than significant***.

Impact GE-5: The proposed project would not directly or indirectly destroy a unique geologic feature or unique paleontological resource. ***(Less than Significant)***

As discussed previously, there are no unique geologic features or unique paleontological resources that would be disturbed at the project site. Therefore, impacts related to paleontological resources and unique geologic features would be ***less than significant***.

Impact C-GE-1: The proposed project in combination with cumulative projects would not result in significant cumulative impacts related to geology or paleontological resources. ***(Less than Significant)***

Environmental impacts related to geology and soils are generally site-specific. Nearby cumulative development projects would be subject to the same seismic safety standards and design review procedures that are applicable to the proposed project. Compliance with the seismic safety standards and the design review procedures would ensure that the effects of nearby cumulative development projects would be reduced to less-than-significant levels. For these reasons, the proposed project would not combine with

past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to geology and soils. Therefore, the impact would be ***less than significant***.

E.17 Hydrology and Water Quality

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
17. HYDROLOGY AND WATER QUALITY. Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater 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 that would:					
i) Result in substantial erosion or siltation on- or offsite;	☐	☐	☒	☐	☐
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?	☐	☐	☒	☐	☐

Environmental Setting

Surface Water Hydrology

The proposed project is located partially within the Highline Canal (also called Millbrae Canal) watershed, a small watershed through which water flows generally from the west near Interstate 280 into San Francisco Bay. The inland extent of the Highline Canal is located along the western edge of the project site. The Highline Canal empties into the bay through two 12-by-10-foot flap gates, which prevent backflow from entering the channel at high tides. The northernmost portion of the project site is located within the San Bruno Creek/El Zanjon watersheds. El Zanjon Creek flows from Junipero Serra Park eastward and eventually converges with San Bruno Creek. San Bruno Creek flows northeastward, eventually draining near the Airport. A portion of San Bruno Creek known as Cupid Row Canal is located on the northern portion of the project site near Substation BA.

Groundwater Hydrology

The project site overlies the Westside Groundwater Basin (2-035), which extends from near Golden Gate Park in the north to Hillsborough in the south, and from the San Andreas Fault in the west to the hills dividing eastern and western San Francisco in the east.[137] The basin opens to the Pacific Ocean on the northwest and San Francisco Bay on the southeast. The groundwater closest to the ground surface is often referred to as *shallow groundwater* or the *water table*. Shallow groundwater underlying the project site is of poor quality and is not used for supply. Shallow groundwater levels are influenced by seasonal variations in precipitation, tidal levels, local irrigation, and other factors. The project site includes perennial wetlands, which are likely connected to the shallow groundwater.

Flooding and Flood Risk

Low-lying areas along San Francisco Bay's shoreline, including the Airport, are subject to flooding during periods of extreme high tides, storm surge, and waves, in addition to *riverine flooding*, which refers to flooding caused by prolonged or intense precipitation in upstream watersheds that produces high flows in creeks and streams. In downstream reaches adjacent to San Francisco Bay, high tides that occur during peak storm-related discharges can exacerbate riverine flooding by raising the riverine flood profile above the level that may occur because of high discharge alone.[138]

The *100-year floodplain* denotes an area that has a 1 percent chance of being inundated during any 12-month period. Floodplain zones (*Special Flood Hazard Areas*) are determined by the Federal Emergency Management Agency (FEMA) and used to create Flood Insurance Rate Maps (FIRMs). These tools assist communities in mitigating flood hazards through land use planning. FEMA also outlines specific regulations, intended to be adopted by the local jurisdictions, for any construction, whether residential, commercial, or industrial, within 100-year floodplains.

[137] California Department of Water Resources, *San Francisco Bay Hydrologic Region, Westside Groundwater Basin*, California's Groundwater Bulletin 118, January 2006.
[138] California Department of Water Resources, *San Francisco Bay Hydrologic Region, Westside Groundwater Basin*, California's Groundwater Bulletin 118, January 2006.

Although the Airport is not geographically contiguous with San Francisco, flood risk at the Airport is included on the City and County of San Francisco FIRM, which depicts the 100-year flood zone.[139] A FIRM published by FEMA identifies a majority of the project site as being within the 100-year flood hazard zone, with water surface elevations for the 100-year flood of 10 feet North American Vertical Datum of 1988.[140] Select areas of the project site are outside of the 100-year flood zone but are within the *500-year flood zone*.[141] The project site is not within a tsunami hazard zone.[142]

Impacts and Mitigation Measures

Impact HY-1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. *(Less than Significant)*

Construction

STORMWATER RUNOFF

The proposed project would replace linear underground cable line for the transmission of electrical energy, along with ancillary facilities (new access roads and pads) that would function primarily as support for linear construction activities. Project construction on the WOB property would be subject to the waste discharge requirements of the Airport's water quality certification under Section 401 of the federal Clean Water Act (401 certification).

SFO has also developed an Industrial SWPPP that conforms to the requirements of SFO's NPDES Industrial Permit and provides for stormwater discharges from industrial activities. The Airport has adopted and implements the Industrial SWPPP to prevent construction and ongoing industrial activities from degrading surface water and groundwater quality through the transport of pollutants in stormwater. The Industrial SWPPP requires the implementation of specific guidelines for construction activities on Airport property. These guidelines require the preparation of site-specific construction SWPPPs for all Airport construction to address stormwater discharges and avoid the release or transport of pollutants associated with construction activity (e.g., sediment) on Airport property.

During construction of the proposed project, SFO's contractors would be required to implement Airport Division Document 01 57 23 (Stormwater Pollution Prevention and Erosion and Sediment Control), which requires, for projects that would result in ground disturbance of more than 1 acre, development and implementation of a site-specific construction SWPPP containing stormwater BMPs, designed to control and reduce soil erosion. The BMPs may include stormwater runoff quality control measures, watering for dust control, dewatering procedures, and the placement of silt fences, straw wattles, or other BMPs, as needed. The site-specific construction SWPPP must comply with the 401 certification waste discharge requirements and the requirements of the Construction Guidelines in SFO's Industrial SWPPP. The site-specific construction SWPPP must be approved by SFO's Bay Pollution Prevention Program (or BPPP) Compliance

[139] Rodriguez, Luis, Federal Emergency Management Agency, letter to Linda Yeung, Deputy City Administrator, City and County of San Francisco, January 28, 2011.
[140] Federal Emergency Management Agency, National Flood Insurance Program Flood Insurance Rate Map, San Francisco County and Incorporated Areas, FIRM Panels 0602980282A and 0602980244A, effective date March 2021.
[141] The *500-year flood zone* has a 0.2 percent chance of being equaled or exceeded in any given year.
[142] California Geological Survey, Tsunami Hazard Area Map, https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/, accessed September 30, 2024.

Section before the start of any ground-disturbing activities. Pursuant to Airport Division Document 01 57 23, contractors are also prohibited from discharging any liquid, solution, wash water, or operational effluent into any drainage areas on or off Airport property until approval is received from the BPPP. The BPPP Compliance Section also monitors and evaluates BMP effectiveness during construction activities. SFO's ASCMs also include requirements for management of hazardous materials, demolition rubbish and debris, dust, and trash (Divisions 01 33 16 and 01 35 43.01) and containment and disposal requirements for disposal of contaminated soil, sludge, and water (Division 01 35 43.16). Managing these potential pollutants consistent with the general requirements of SFO's ASCMs would avoid or reduce water quality degradation during construction.

With implementation of site-specific BMPs as prescribed by SFO's ASCMs, the 401 certification, and SFO's Industrial NPDES Permit, water quality impacts related to violation of water quality standards or degradation of water quality due to discharge of construction-related stormwater runoff would be ***less than significant***.

GROUNDWATER DEWATERING

SFO's ASCMs and the 401 certification include requirements applicable to groundwater dewatering. Dewatering discharges must not adversely affect human health or the environment and must be absent of pollutants in quantities that threaten to cause pollution or nuisance. Dewatering activities in areas with known soil and/or groundwater contamination are prohibited where that contamination could cause an exceedance of receiving water limitations.[143] The groundwater must be analyzed for pH and turbidity and its release must cease if limits on these pollutants are exceeded. During construction (including dewatering activities), SFO would be required to implement SFO's ASCMs, including Division 01 57 00 (Temporary Controls), which contains dewatering BMPs as well as a Dewatering Plan, which would detail the proposed method of handling and disposal of groundwater. The Industrial SWPPP also outlines the construction water–handling procedures applicable to work at the Airport.

Dewatered groundwater on the Airport side would be fed to and treated at SFO's Mel Leong Treatment Plant (MLTP), which operates under an NPDES permit. The MLTP treats sanitary and industrial wastewater generated at SFO.[144] Stormwater treated at the MLTP is discharged to the deepwater channel in lower San Francisco Bay via the North Bayside System Unit.[145] In 2019, the MLTP treated average daily flows of 0.74 million gallons per day (mgd) of sanitary wastewater and 0.51 mgd of industrial wastewater; the highest reported average daily flow at the MLTP for combined sanitary and industrial wastewater was 2.3 mgd.[146] The MLTP has generally operated in compliance with its current NPDES permit since issuance of the order in 2018, with only four sanitary wastewater violations between 2019 and 2022.[147] As discussed in Impact UT-2, dewatered groundwater from construction of the proposed project is not expected to affect treatment capacity at the MLTP. The Industrial SWPPP's procedures and requirements state that the MLTP lab must sample construction water from dewatering activities and analyze the dewatering effluent for pollutants

[143] As discussed in Section E.18, Hazards and Hazardous Materials, there are no known soil or groundwater contamination sites at the project site.
[144] Mel Leong Treatment Plant–Sanitary and Industrial Plants, NPDES Permit Number CA0038318, California Regional Water Quality Control Board Order Number R2-2018-0045.
[145] The North Bayside System Unit is a joint powers authority that includes the City and County of San Francisco, acting through its Airport Commission, along with nearby cities, and owns and operates an effluent force main, a combined effluent pump station, effluent dechlorination facilities, and a deepwater outfall to the deep channel in lower San Francisco Bay.
[146] Mel Leong Treatment Plant–Annual Report 2019, NPDES Permit Number CA0038318, California Regional Water Quality Control Board Order Number R2-2018-0045.
[147] California Integrated Water Quality System Project, *Facility At-A-Glance Report for SF Airport Mel Leong Treatment Plant–Sanitary Waste*, accessed September 27, 2024.

before it is discharged to determine whether all water quality constituent parameters fall below acceptable discharge limits.

Contractors may not dispose of any water in SFO's stormwater, industrial, or sanitary system without prior review and approval from SFO's BPPP Section. The BPPP Section is responsible for and oversees all construction-related and operational water quality monitoring and reporting programs so that onsite treatment and/or disposal will adhere to SFO's ASCMs and the conditions of SFO's NPDES permit, Industrial SWPPP, and 401 certification water discharge requirements.

Therefore, with implementation of applicable water quality protection requirements, water quality impacts related to violation of water quality standards or degradation of water quality due to discharge of dewatering water would be ***less than significant***.

Operation

Project operations would not alter existing land uses, expand facilities requiring maintenance, or substantially increase impervious surface area and therefore would not increase the risk of degrading surface water quality. The new access roads and pads would allow for water infiltration. Every two years during inspections, groundwater would be dewatered from the manholes. Dewatered groundwater would be collected and taken to the MLTP for treatment, as described for construction-phase dewatering. Therefore, water quality impacts related to violation of water quality standards or degradation of water quality during project operation would be ***less than significant***.

Impact HY-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede the sustainable groundwater management of the basin. ***(Less than Significant)***

Construction

As discussed in Impact HY-1, during construction the proposed project would be required to comply with SFO's ASCMs, the Airport's 401 certification and waste discharge requirements, and SFO's Industrial NPDES Permit, which necessitates implementation of stormwater control BMPs designed to control and reduce soil erosion, among other requirements. Erosion control and sediment control BMPs could include the placement of silt fences, straw wattles, or other BMPs as determined by a state-certified qualified SWPPP practitioner. In addition, construction of the proposed project would not require ground disturbance within a stream or river. For these reasons, construction of the proposed project would not substantially alter the existing drainage pattern in a manner that would result in substantial erosion, siltation, or flooding onsite or offsite, and this impact would be ***less than significant***.

Operation

The proposed project would widen existing access roads from 5 feet to 12 feet by placing filter grid material over the existing grade and adding gravel layers on top. Filter grid material is generally designed to stabilize gravel while allowing water to infiltrate through the material. Filter grid material topped by gravel would also be used at the access pads surrounding existing manholes. Therefore, the proposed project's wider access roads and new access roads and pads would not interfere substantially with groundwater recharge.

Proposed project operations would not require the use of groundwater for water supply. Electrical equipment would be inspected every two years, which would require temporary groundwater dewatering of manholes for safe access. Shallow groundwater is not used for water supply in the area. Therefore, temporary groundwater dewatering during operation would not substantially decrease groundwater supplies.

Operation of the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge, and the impact would be ***less than significant***.

Impact HY-3: The proposed project would not 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 that would result in substantial erosion, siltation, or flooding onsite or offsite. ***(Less than Significant)***

Construction

As discussed in Impact HY-1, during construction the proposed project would be required to comply with SFO's ASCMs, the state's Construction General Permit, and SFO's Industrial NPDES Permit, which necessitates implementation of stormwater control BMPs designed to control and reduce soil erosion, among other requirements. Erosion control and sediment control BMPs could include the placement of silt fences, straw wattles, or other BMPs as determined by a state-certified qualified SWPPP practitioner. In addition, construction of the proposed project would not require ground disturbance within a stream or river. For these reasons, construction of the proposed project would not substantially alter the existing drainage pattern in a manner that would result in substantial erosion, siltation, or flooding onsite or offsite, and this impact would be ***less than significant***.

Operation

The new or widened access roads would not cross a stream or river, and none of the proposed project components would require alteration of the course of a stream or river. As discussed in Impact HY-2, the widened access roads and access pads surrounding the manholes would consist of gravel on filter grid material, which allows for water infiltration; therefore, the proposed project would not substantially increase impervious surfaces. Dewatered groundwater would be collected and taken to the MLTP for treatment, as described for construction-phase dewatering, and therefore would not cause substantial erosion or siltation. For these reasons, operation of the proposed project would not substantially alter the existing drainage pattern in a manner that would result in substantial erosion, siltation, or flooding onsite or offsite, and this impact would be ***less than significant***.

Impact HY-4: 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. ***(Less than Significant)***

As discussed in Impact HY-2, the proposed project would not create new impervious surfaces that could contribute new runoff water to existing stormwater drainage systems or provide substantial additional sources of runoff. The project would not alter land use in the area and would not require the use of potential

water quality pollutants. Therefore, construction and operation of 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, and this impact would be ***less than significant***.

Impact HY-5: The proposed project would not impede or redirect flood flows. ***(Less than Significant)***

A majority of the project site is within a flood hazard zone, with water surface elevations of 10 feet North American Vertical Datum of 1988 for a flood event with a 1 percent chance of occurring within a given year. The project site is not within a mapped floodway and would not require alteration of the course of a stream or river. Approximately 6,700 cubic yards of aggregate material would be brought on to the site to create access roads and access pads and raise manhole elevations. The placement of additional fill to widen and raise the access roads and pads could displace some water during a flood; however, given the site's topography and the volume of fill relative to the size of the project site within the flood hazard zone, the change in water surface elevation would be minimal. Therefore, the proposed project would not impede or redirect flood flows, and this impact would be ***less than significant***.

Impact HY-6: The proposed project would not risk the release of pollutants from project inundation in flood hazard, tsunami, or seiche zones. ***(Less than Significant)***

A *seiche* (a temporary disturbance in the water level) is caused by oscillation of the surface of an enclosed body of water such as San Francisco Bay as a result of an earthquake or large wind event. Seiches can generate long-period waves that cause run-up or overtopping of adjacent landmasses, similar to tsunami run-up. However, the project site is not located within a tsunami hazard area.[148] Therefore, the proposed project would not be at risk of inundation by tsunami or seiche and only flood hazard risks are discussed below.

Construction

As discussed above, the proposed project is located within a flood hazard zone. If handled improperly, pollutants used during construction could be released if inundation were to occur. As discussed in Impact HY-1, BMPs required by SFO's ASCMs would include measures for covering soil stockpiles, and for the management of construction wastewater and stormwater runoff. Such measures may include the use of straw wattles, sandbags, and silt fencing that would control erosion and sedimentation during construction to prevent runoff of sediment and materials from the work areas.

Construction materials and chemicals used in the project area would also be handled consistent with the non-stormwater management requirements of SFO's ASCMs, which would require containment around hazardous materials storage areas. With appropriate containment of construction chemicals and the low likelihood that a flood or tsunami would occur during the construction period, the impact related to the potential for the proposed project to risk a release of pollutants in the event of inundation would be ***less than significant***.

[148] California Geological Survey, Tsunami Hazard Area Map, https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/, accessed December 18, 2024.

Operation

The project site is located within a flood hazard zone, but the proposed project does not include storage of potential pollutants. During operation, the proposed project would not risk a release of pollutants from project inundation, and ***no impact*** would occur.

Impact HY-7: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. ***(Less than Significant)***

Because the proposed project would not decrease groundwater supplies or interfere with groundwater recharge, the project would not conflict with any sustainable groundwater management plan. The San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) identifies beneficial water uses, water quality objectives to protect the designated beneficial water uses, and strategies and time schedules to achieve the water quality objectives. A project could obstruct implementation of the Basin Plan by degrading water quality such that identified water quality objectives or strategies would not be met and beneficial uses would be adversely affected.

As analyzed in Impact HY-1, although construction activities could release sediment or construction chemicals that could become entrained in stormwater runoff, compliance with SFO's ASCMs would require the implementation of BMPs for stormwater and non-stormwater controls that would minimize potential discharges containing sediment and pollutants. Groundwater from dewatered areas would be contained and tested before release into the MLTP or the stormwater collection system, consistent with requirements of SFO's ASCMs, the Airport's 401 certification and waste discharge requirements, and SFO's Industrial NPDES Permit. Project operation would not degrade water quality. Therefore, with implementation of BMPs required by the applicable water quality protection requirements, the proposed project would not conflict with or obstruct implementation of a water quality control plan, and this impact would be ***less than significant***.

Impact C-HY-1: The proposed project in combination with cumulative projects would not result in significant cumulative impacts on hydrology or water quality. ***(Less than Significant)***

The geographic scope for potential cumulative impacts related to hydrology and water quality encompasses the project area, receiving water bodies, and groundwater underlying the project area.

Cumulative projects and the proposed project could further exacerbate the high pollutant levels in central San Francisco Bay through erosion and sedimentation from construction activities or stormwater runoff to the storm drain system and waterways, accidental releases of chemicals and fuels, or discharges of dewatered groundwater. All cumulative projects larger than 1 acre would be required to implement stormwater pollution controls consistent with the *NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities* (Order 2022-0057-DWQ, NPDES Permit No. CAS000002) (Construction General Permit)[149], which is intended to prevent cumulative water quality degradation from construction projects. The Construction General Permit would require the implementation of BMPs for the

[149] State Water Resources Control Board, *NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities, Order 2022-0057-DWQ, NPDES Permit No. CAS000002*, 2022.

management of construction stormwater and non-stormwater, which may include but not be limited to erosion control measures, containment measures, and monitoring and reporting requirements. Compliance with existing regulatory requirements and permits would minimize potential impacts on water quality, and the proposed project in combination with cumulative projects would not result in a significant cumulative impact on surface water quality or hydrology.

Groundwater dewatering could be required during construction of the proposed project and the cumulative projects. Dewatering of groundwater associated with the proposed project and cumulative projects would draw shallow groundwater that is not used as groundwater supply. Furthermore, any cumulative effects related to lowering the shallow groundwater table due to dewatering would be temporary and localized. The proposed project, in combination with other cumulative projects, would not result in a significant cumulative impact on groundwater recharge and supplies.

For the reasons discussed above, the cumulative impact on hydrology and water quality would be ***less than significant***.

E.18 Hazards and Hazardous Materials

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
18. HAZARDS AND HAZARDOUS MATERIALS. Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	☐

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard 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?	☐	☐	☐	☒	☐

The proposed project consists of constructing new or improving existing gravel access roads, constructing gravel access pads around manholes, and replacing electrical cables inside an existing underground utility tunnel. Schools located within 0.25 mile of the project site include the Happy Hall School at 233 Santa Inez Avenue in San Bruno and the Belle Air Elementary School at 450 3rd Avenue in San Bruno. Airports located within 2 miles of the project site include SFO located east of the project site across U.S. 101. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5.[150] The project site is in a highly urbanized setting with no nearby wildlands and is not located within or near a very high fire hazard severity zone.[151]

Impact HZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. *(Less than Significant)*

During the proposed project's construction phase, construction equipment would include fuels, oils, and lubricants for the construction equipment, which are commonly used in construction. With the exception of fuel (i.e., gasoline and diesel) for vehicles and equipment, neither construction nor operation of the proposed project would involve the routine transport, use, or disposal of significant quantities of hazardous materials. Small quantities of commercially available hazardous materials, such as cleaning solvents, may be used; however, these materials would not be expected to be used in sufficient quantities or contrary to normal use, and therefore would not pose a threat to human health or the environment. Gasoline and diesel are considered hazardous materials. However, the fueling or repair of vehicles and equipment would occur offsite; no fuel would be stored onsite other than in the sealed fuel tanks of vehicles and equipment. The construction materials (i.e., gravel and electrical cable) would not be hazardous materials.

[150] State Water Resources Control Board and California Department of Toxic Substance Control, 2024. GeoTracker and EnviroStor websites, https://geotracker.waterboards.ca.gov/, https://www.envirostor.dtsc.ca.gov/public/, accessed September 23, 2024.
[151] California Department of Forestry and Fire Protection, *Fire Hazard Severity Zone Viewer*, accessed September 29, 2024.

In addition, and as discussed above in Impact GE-2 and Impact HY-1, the proposed project would be required to prepare a SWPPP for construction activities, which would list the hazardous materials proposed for use during construction; describe spill prevention measures, equipment inspections, and equipment and fuel storage; identify protocols for responding immediately to spills; and describe BMPs for controlling site runoff. SFO's ASCMs also regulate the handling and removal of hazardous materials, demolition rubbish and debris, dust, and trash (Divisions 01 33 16 and 01 35 43.01) and containment and disposal requirements for disposal of contaminated soil, sludge, and water (Division 01 35 43.16). In addition, the transportation of hazardous materials would be regulated by the U.S. Department of Transportation, Caltrans, and the California Highway Patrol. Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of an accidental release.

The required compliance with existing hazardous materials laws and regulations that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for the proposed project to create hazardous conditions due to the routine use or accidental release of hazardous materials and would render this impact ***less than significant***.

Impact HZ-2: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. ***(Less than Significant)***

As discussed previously, two schools are located within 0.25 mile of the project site. Access to the project site would be on 1st Avenue, which passes by the Belle Air Elementary School but not the Happy Hall School. Construction vehicles and equipment would contain gasoline or diesel, which are hazardous materials. The release of fuel could affect construction workers, the public, or the environment.

The fuel would be contained within the fuel tanks of the vehicles and equipment. No fueling or repair activities would occur on the project site; equipment fueling, repair, and maintenance activities would occur at offsite fueling stations and maintenance facilities. In addition, and as discussed above in Impact GE-2 and Impact HY-1, the proposed project would be required to prepare a SWPPP for construction activities that would list the hazardous materials proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; identify protocols for responding immediately to spills; and describe BMPs for controlling site runoff. SFO's ASCMs also regulate the handling and removal of hazardous materials as described in Impact HZ-1. In addition, the transportation of hazardous materials would be regulated by the U.S. Department of Transportation, Caltrans, and the California Highway Patrol. Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release.

The required compliance with existing hazardous materials laws and regulations that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for the proposed project to create hazardous conditions due to the use or accidental release of hazardous materials and would render this impact ***less than significant***.

Impact HZ-3: 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 but would not create a significant hazard to the public or the environment. ***(No Impact)***

Pursuant to section 65962.5 of the Government Code, the Secretary for Environmental Protection maintains a list of sites with potentially hazardous wastes, commonly referred to as the Cortese list. The Cortese list includes hazardous waste sites from the California Department of Toxic Substances Control's EnviroStor database; hazardous facilities identified by the California Department of Toxic Substances Control that are subject to corrective action pursuant to Health and Safety Code section 25187.5; leaking underground storage tank sites from the State Water Board's GeoTracker database; solid waste disposal sites maintained by the State Water Board; and sites with active cease and desist orders and cleanup and abatement orders. As discussed previously, the project site is not on the Cortese List and the proposed project would not create a significant hazard to the public or environment.[152] Therefore, ***no impact*** would occur.

Impact HZ-4: The proposed project would not result in a safety hazard or excessive noise for people residing or working in a project area located within an airport land use plan or within two miles of an airport. ***(Less than Significant)***

Impacts related to noise are analyzed above in Section E.7, Noise and Vibration.

The project site is not located within the outer boundary of the Safety Zone defined in the SFO *Comprehensive Airport Land Use Compatibility Plan*.[153] In addition, the proposed project does not include the construction of any structures that would interfere with navigable airspace. Therefore, impacts related to being located within 2 miles of an airport would be ***less than significant***.

Impact HZ-5: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. ***(Less than Significant)***

As discussed above in Section A.5, Construction, the maximum number of vehicles and mobile equipment that would be onsite at any given time would be eight. All work would be conducted off public roads, no staging areas would be on public roads, and the proposed project would not require public road closures or lane restrictions. Even if all of the vehicles and equipment were to arrive or leave the project site at the same time, this number of vehicles and equipment would not impair or interfere with emergency response or evacuation. No changes are proposed to the public right-of-way; thus, the proposed project would not substantially increase hazards due to a design feature or incompatible uses and would not result in inadequate emergency access. Therefore, impacts related to emergency response or evacuation would be ***less than significant***.

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[152] State Water Resources Control Board and Department of Toxic Substance Control, GeoTracker and EnviroStor websites, https://geotracker.waterboards.ca.gov/, https://www.envirostor.dtsc.ca.gov/public/, accessed September 23, 2024.
[153] Rincondo, *Comprehensive Airport Land Use Compatibility Plan* for the *Environs of San Francisco International Airport*, November 2012.

Impact C-HZ-1: The proposed project in combination with cumulative projects would not result in significant cumulative impacts related to hazards or hazardous materials. ***(Less than Significant)***

Development on Airport property is subject to City and state controls designed to protect the public and the environment from risks associated with hazards and hazardous materials, and to ensure that emergency access routes are maintained. Any future development in the project vicinity would be subject to these same state laws and regulations in addition to applicable local laws and regulations. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to hazards and hazardous materials. Therefore, the impact would be ***less than significant***.

E.19 Mineral Resources

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
19. MINERAL RESOURCES. Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒	☐

Impact MR-1: The proposed project would not 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)***

For purposes of this analysis, *mineral resources* include sand, clay, gravel, and rock deposits that could be located within the project site and that would be of value to the region and residents of the state.

The California Department of Conservation, Division of Mines and Geology (now known as the California Geological Survey) has mapped mineral resources in the bay area, including resources such as sand and gravel and other economically valuable resources.[154] The project site is located within the San Francisco South Quadrangle on land classified as Mineral Resource Zone 1 (MRZ-1), which includes "areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is

[154] California Department of Conservation, Division of Mines and Geology, *Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area*, Special Report 146, Part II, Plate 2.42 San Francisco South Quadrangle, 1987, https://filerequest.conservation.ca.gov/?q=SR_146-2, accessed September 16, 2024.

judged that little likelihood exists for their presence."[155] Therefore, ***no impact*** related to valuable mineral resources would occur as a result of implementation of the proposed project.

Impact MR-2: The proposed project would not 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 San Francisco General Plan's Environmental Protection Element states that, as a very urban place, San Francisco does not contain mineral resources to any appreciable extent.[156] As a result, consideration of mineral resources is omitted from the San Francisco General Plan. The San Mateo County General Plan shows no mapped mineral resources within the project site.[157] The City of San Bruno General Plan makes no mention of locally important mineral resource recovery sites.[158] Therefore, ***no impact*** related to local mineral resource recovery sites would occur as a result of implementation of the proposed project.

Impact C-MR-1: The proposed project in combination with cumulative projects would not result in the loss of valuable mineral resources. ***(No Impact)***

As described above, the project site is in an area designated MRZ-1, which indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. Because the proposed project would result in no impact on mineral resources, the proposed project would not have the potential to combine with cumulative projects to result in a significant cumulative impact on mineral resources. For this reason, the proposed project would have ***no impact***.

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[155] California Department of Conservation, Division of Mines and Geology, *Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area*, Special Report 146, Part II, Plate 2.42 San Francisco South Quadrangle, 1987, https://filerequest.conservation.ca.gov/?q=SR_146-2, accessed September 16, 2024.
[156] San Francisco Planning Department, Environmental Protection Element, amended January 31, 2023, https://generalplan.sfplanning.org/I6_Environmental_Protection.htm#, accessed September 16, 2024.
[157] San Mateo County, General Plan, November 1986, https://www.smcgov.org/planning/general-plan, accessed September 16, 2024.
[158] City of San Bruno, San Bruno General Plan, adopted March 24, 2009, https://www.sanbruno.ca.gov/DocumentCenter/View/1666/General-Plan-Complete-PDF, accessed October 7, 2024.

E.20 Energy

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
20. ENERGY. 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?	☐	☐	☒	☐	☐

Impact EN-1: The proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. ***(Less than Significant)***

Construction

Construction of the proposed project would require the use of fuel-powered equipment and vehicles, resulting in the consumption of gasoline or diesel fuel. Heavy construction equipment (e.g., grader, dump trucks, forklift) would be diesel powered, while smaller construction vehicles such as pickup trucks would be gasoline powered. The precise amount of fuel required for construction of the proposed project is uncertain; however, it is expected that the quantity of gasoline and diesel used by construction equipment, workers' vehicles, and haul vehicles would be comparable to the quantity used for similar construction projects in the area. The construction fleet—both on-road vehicles and off-road equipment—may also use biodiesel or renewable diesel, provided that the use of such fuels is demonstrated to reduce emissions of criteria air pollutants and GHGs compared to conventional fuel. Further, the construction contractors would be required to use electric equipment where feasible in compliance with SFO's ASCMs Division 01 57 00. Electric power would be used mainly to provide service to the welding machines, pumps, and portable equipment.

In addition, indirect electricity usage would occur for the supply, distribution, and treatment of water used for construction. This analysis conservatively assumes that all electrical power would be obtained from generators. The construction contractor would have a financial incentive to use fuel and energy efficiently, because excess usage would increase costs and reduce profits. The use of fuel and energy during construction would not be wasteful or inefficient, and the impact of construction-related fuel and energy usage would be ***less than significant***.

Operation

The proposed project would involve the replacement of existing electrical infrastructure on the project site and the completion of associated access improvements. The proposed project would not increase the intensity of use of the project site and would not increase the use of electricity during operations. The total energy delivered to serve the load at the Airport would not change as a result of the proposed project. Operational activity would not increase with the proposed project as compared with existing conditions. The

proposed project would not generate any new employees; operation and maintenance would be performed by existing SFO staff. Therefore, as described above, fuel and energy usage during operation would not be wasteful or inefficient. The impact from energy usage during project operation would be ***less than significant***.

Impact EN-2: The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. ***(Less than Significant)***

California's renewable energy and energy efficiency plans include the Renewables Portfolio Standard Program (as revised by Senate Bill X1-2), which required utilities to increase their renewable energy generation to 33 percent by 2020, and the California Energy Efficiency Strategy Plan, which was developed to provide a roadmap for energy efficiency in California through the year 2020 and beyond. At a local level, the majority of San Francisco's energy-efficiency requirements are geared toward commercial and residential development and do not apply to the proposed project. Because the 12 kV electrical cables would be replaced with the same voltage, there would be no capacity increase, and the total energy delivered to serve the load at the Airport would not change because of the proposed project. The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, this impact would be ***less than significant***.

Impact C-EN-1: The proposed project in combination with cumulative projects would increase the use of energy, fuel, and water resources, but not in a wasteful manner. ***(Less than Significant)***

The geographic context for the analysis of potential cumulative impacts related to energy consists of the conservation, development, and infrastructure projects generally located on and within 0.25 mile of the project site. Those projects are listed in Table 7, p. 23, and mapped on Figure 11, p. 26. The cumulative projects would develop commercial and Airport-related uses that would result in a cumulative increase in the demand for energy, fuel, and water.

Although overall energy demand in California is increasing commensurate with the increasing population, the state is also making concerted energy conservation efforts. Cumulative projects would create demand for energy and fuel; however, both state and local policies seek to minimize increases in demand through conservation and energy efficiency regulations and policies so that energy is not used in a wasteful manner. Nearby cumulative projects would be subject to the same statewide energy and water conservation ordinances as the proposed project. Therefore, the proposed project, in combination with cumulative projects, would result in a ***less-than-significant*** cumulative impact related to the wasteful use of energy, fuel, and water resources.

E.21 Agriculture and Forestry Resources

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
21. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐	☒
b) Conflict with 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 that, due to their location or nature, could result in conversion of farmland to non-agricultural use or forest land to non-forest use?	☐	☐	☐	☐	☒

The project site consists of portions of the WOB property and a portion of the Airport area east of U.S. 101. The portion of the project site on the WOB property is an undeveloped tract of land that contains critical infrastructure supporting Airport operations and provides habitat and wetland areas for sensitive species. Additionally. the portion of the project site east of U.S. 101 is within an operational international airport. Therefore, the project site is not used for farming or agricultural activities. The land on the project site is designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as

Other Land.[159] The California Department of Conservation defines "Other Land" as vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres.[160]

Because the project site does not contain agricultural uses and is not zoned for such uses, the proposed project would not require the conversion of any land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use. The proposed project would not conflict with any existing agricultural zoning or Williamson Act contracts.[161] Moreover, the project site does not contain forest or timberlands, does not support timber uses, and is not zoned for timber uses.

Therefore, the proposed project would not conflict with zoning for forest land, cause a loss of forest land, or convert forest land to a different use. For these reasons, agriculture and forestry topics are ***not applicable*** to the proposed project.

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[159] California Department of Conservation, Division of Land Resource Protection, California Important Farmland Finder, 2020, https://maps.conservation.ca.gov/DLRP/CIFF/, accessed September 16, 2024.
[160] California Department of Conservation, Important Farmland Categories, 2024, https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx, accessed September 16, 2024.
[161] California Department of Conservation, California Williamson Act Enrollment Finder, 2023, https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/index.html, accessed September 16, 2024.

E.22 Wildfire

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
22. WILDFIRE. 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 plans?	☐	☐	☐	☐	☒
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 structure to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☐	☒

The California Department of Forestry and Fire Protection maps areas and designated zones with varying degrees of fire hazard: moderate, high, and very high. The project site is not located in or adjacent to lands classified as very high fire hazard severity zones in a State Responsibility Area or a Local Responsibility Area as mapped by CAL FIRE.[162] Furthermore, the project site is not located within the boundaries of an area designated as a Wildland-Urban Interface of a fire-threatened community.[163] Therefore, wildfire topics are ***not applicable*** to the proposed project.

[162] California Department of Forestry and Fire Protection, Fire Hazard Severity Zone Viewer, 2024, https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/, accessed September 16, 2024.
[163] California Department of Forestry and Fire Protection, Wildland-Urban Interface Fire Threat for the San Francisco Bay Region, 2022, https://www.arcgis.com/apps/mapviewer/index.html?layers=d45bf08448354073a26675776f2d09cb, accessed September 16, 2024.

E.23 Mandatory Findings of Significance

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
23. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:					
a) 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 plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	☐
b) 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) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐	☐

As discussed in this initial study, the proposed project is anticipated to have less-than-significant impacts on most of the environmental topics discussed. Where necessary, mitigation measures have been identified to reduce impacts related biological resources to less-than-significant levels. As discussed in Section E.15, Biological Resources, construction of the proposed project could have a substantial adverse effect on Crotch's bumble bees, SFGS and CRLF, and native birds and their nests. Implementation of Mitigation Measure M-BI-1a, Crotch's Bumble Bee Protection Measures; Mitigation Measure M-BI-1b, San Francisco Garter Snake and California Red-Legged Frog Protection Measures; and Mitigation Measure M-BI-1c, Nesting Bird Protection Measures would reduce these impacts to less-than-significant levels. Additionally, the proposed project could have a substantial adverse effect on federally protected wetlands. Implementation of Mitigation Measure M-BI-3, Compensation for Fill of Wetlands, would reduce this impact to a less-than-significant level. With implementation of these mitigation measures described in more detail in Section F, Mitigation Measures, the proposed project would not substantially degrade or 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. The proposed project would also not result in the elimination of important examples of major periods of California history or prehistory.

The proposed project would not combine with past, present, or reasonably foreseeable future projects to create significant cumulative impacts related to any of the topics discussed in Section E, Evaluation of Environmental Effects. There would be no significant cumulative impacts to which the proposed project would make cumulatively considerable contributions.

Potential adverse effects on human beings have been considered as a part of the analysis of individual environmental topics in this initial study. As discussed above, the proposed project is anticipated to have less-than-significant impacts on most of the environmental topics discussed, including the topics of air quality and noise and vibration. Consequently, the proposed project would not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

SECTION F PUBLIC NOTICE AND COMMENT

On September 26, 2024, the planning department mailed a Notification of Project Receiving Environmental Review to owners and occupants within 300 feet of the project site. The planning department did not receive any comments concerning the potential environmental effects of the proposed project.

SECTION G DETERMINATION

On the basis of this Initial Study:

☐ 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 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, no further environmental documentation is required.

Lisa Gibson
Environmental Review Officer
for
Rich Hillis
Director of Planning

DATE 3/19/25

SECTION H INITIAL STUDY PREPARERS

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