



SAN FRANCISCO PLANNING DEPARTMENT

Preliminary Negative Declaration

Date: May 24, 2017
Case No.: **2016-000857ENV**
Project Title: **Courtyard 3 Connector Project**
San Francisco International Airport (SFO)
Project Sponsor: SFO Bureau of Planning and Environmental Affairs
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PROJECT DESCRIPTION:

The City and County of San Francisco, acting through the San Francisco International Airport Commission, proposes to construct a new building in the space between Terminals 2 and 3, known as Courtyard 3, at the San Francisco International Airport (SFO). SFO is located in unincorporated San Mateo County, approximately 13 miles south of downtown San Francisco, east of U.S. Highway 101 and adjacent to San Francisco Bay, near the cities of South San Francisco, San Bruno, and Millbrae. The project site currently includes an approximately 18,000-square foot, asphalt-paved parking lot and a restricted-access service road within the terminal complex. The proposed project would construct a new, approximately 122-foot-tall, 118,700-square-foot building on piers above both Courtyard 3 and a two-story portion of Terminal 2. The building would encompass a new security screening checkpoint and pre-security walkway between Terminals 2 and 3, topped by four levels of office space. A post-security connector walkway bridge would be constructed along the exterior of Terminal 2, providing secure passage from the new building to boarding areas in Terminals 2 and 3. The proposed secure connector would allow passengers post-security access to concessions and restaurants throughout the terminal complex without multiple security screenings. The increased flexibility in circulation would improve access for connecting passengers and reduce demand on security screening processes. The proposed office space would permit administrative and federal agency staff who are currently in various office locations around the terminal complex to relocate and consolidate in a centralized terminal building.

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 Evaluation (Initial Study) for the project, which is attached.

Mitigation measures are not needed for this project to avoid potentially significant effects. See Initial Study Section E, Evaluation of Environmental Effects.

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Initial Study
San Francisco Airport Courtyard 3 Connector Project
Planning Department Case No. 2016-000857ENV

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Initial Study

San Francisco Airport Courtyard 3 Connector Project

Planning Department Case No. 2016-000857ENV

A. PROJECT DESCRIPTION

The City and County of San Francisco (CCSF), acting through the San Francisco International Airport Commission (hereinafter “the Commission”) proposes to construct a new building in the space between Terminals 2 and 3 known as Courtyard 3 at the San Francisco International Airport (hereinafter “SFO” or “the Airport”). The proposed structure would include a new security screening checkpoint, new pre-security and post-security passenger walkways between the two terminals, and four levels of office space.

Project Location and Existing Site Characteristics

SFO is located in unincorporated San Mateo County, approximately 13 miles south of downtown San Francisco. It is east of U.S. Highway 101 (US 101) and adjacent to San Francisco Bay, near the cities of South San Francisco, San Bruno, and Millbrae, as shown on **Figure 1, Airport Location Map**. The Airport property consists of approximately 5,110 acres and is the largest airport in size, annual passengers, and aircraft operations (takeoffs and landings) in the San Francisco Bay Area. According to SFO, the Airport served more than 53 million passengers in 2016,¹ supports nearly 36,400 direct Airport jobs, and contributes to almost 156,000 jobs in the area.²

The project site is located at Courtyard 3, which includes an approximately 18,000-square-foot (sf), asphalt-paved parking lot and a restricted access service road, located between Terminal 2 and Terminal 3 at the SFO main terminal complex (**Figure 2, Project Site Map**). Airport operations can be divided into two areas: the landside, which includes all publicly accessible roadways and development; and the secured air operations area (AOA), which includes the runways, taxiways, and aircraft parking aprons. Courtyard 3 provides vehicular access through a secured gate to the AOA from the airport loop road located at the ground level (also referred to as Level 1 or the arrivals level) on the western side of Courtyard 3. In addition to the Courtyard 3 parking lot, the project site includes the following: the existing pre-security, connector structure between Terminals 2 and 3 on Level 2 (the departures level); the existing Communications Center located in the adjacent two-story portion of Terminal 2; and, an approximately 8,000-sf paved area located immediately adjacent to and along the AOA side of Terminal 2. **Figure 3, Proposed Project Site**, provides an aerial view of the project site and its construction area.

¹ San Francisco International Airport. Press Release: “SFO Shatters Annual Traffic Record with 53.1 Million Passengers in 2016.” <http://www.flysfo.com/media/press-releases/sfo-shatters-annual-traffic-record-531-million-passengers-2016>. Accessed on February 6, 2017.

² San Francisco International Airport, *SFO Annual Report 2015, Fiscal year 2014-2015*.

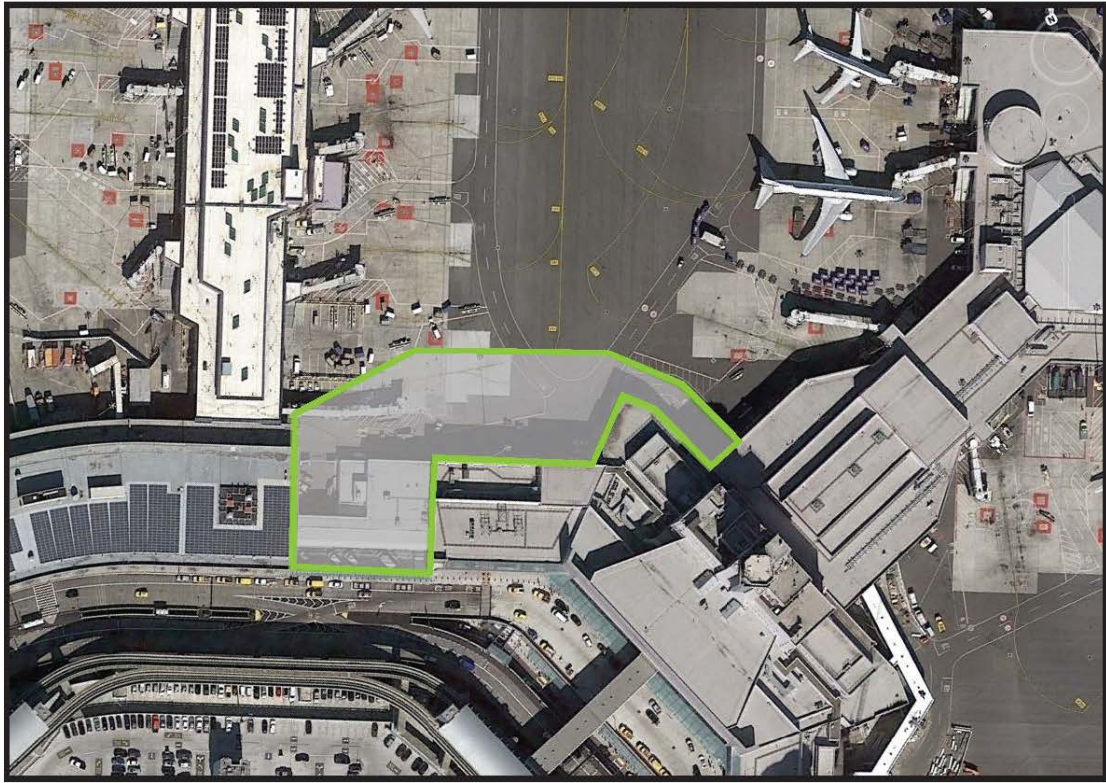


Figure 1. Airport Location Map



Figure 2. Project Site Location

Proposed T2/T3 Connector Project Construction Area



Aerial Source: Google
April 2016

Figure 3. Proposed project site

Project Background and Objectives

The purposes of the Courtyard 3 Connector project are to enhance passenger level of service, to consolidate office uses for existing Airport administrative staff and critical Federal support agencies, and to provide space for potential future expansion of airline offices and club lounges. The proposed secure connector would allow passengers who have gone through security access to concessions and restaurants throughout the terminal complex without multiple security screenings. The increased flexibility in circulation would improve access for connecting passengers and reduce demand on security screening processes. The proposed relocation and expansion of an existing security screening checkpoint in Terminal 3 would facilitate modern airport security screening needs.

The proposed consolidation of office uses in a centralized terminal space is intended to better serve passengers, tenant businesses, and Airport staff. Currently, Airport administrative staff (e.g., Executive Staff, Revenue Development, and Aviation Management) are located in several offices in and around the terminal complex. In addition, the Federal Bureau of Investigation (FBI), Transportation Security Administration, Airport Liaison, and Guest Services offices are located in the International Terminal Building. Existing offices would be transferred from these various locations to the proposed office space above the Courtyard 3 Connector. The proposed new office space would also provide flexible space for temporary office relocation during reconstruction or renovation of existing offices elsewhere at the Airport.

In recent years, international air carrier service at the Airport has grown rapidly in operations and number of carriers. The increase of international service requires additional carrier satellite offices and expansion of club lounges to meet customer level of service standards found at many large hub airports. With the proposed relocation of existing office uses from the International Terminal Building, these areas would be available to accommodate international airline staff offices and club lounge expansion that may occur in the future.

Project Components

The proposed project would demolish the existing pre-security connector structure between Terminals 2 and 3 and construct a new, approximately 122-foot-tall building on piers above both Courtyard 3 and a two-story portion of Terminal 2. The building would encompass a new security screening checkpoint and pre-security walkway between Terminals 2 and 3, topped by four floors of office space. A post-security connector walkway bridge would be constructed along the exterior of Terminal 2, providing secure passage from the new building to boarding areas in Terminals 2 and 3. The Courtyard 3 Connector project would be designed and constructed by the

Airport to Leadership in Energy & Environmental Design (LEED®) Gold standards, consistent with the City's Green Building Code.³

Figure 4 depicts the six levels of the proposed Courtyard 3 Connector building and the connecting walkway structure that would provide post-security passage from the security checkpoint to Terminal 2.

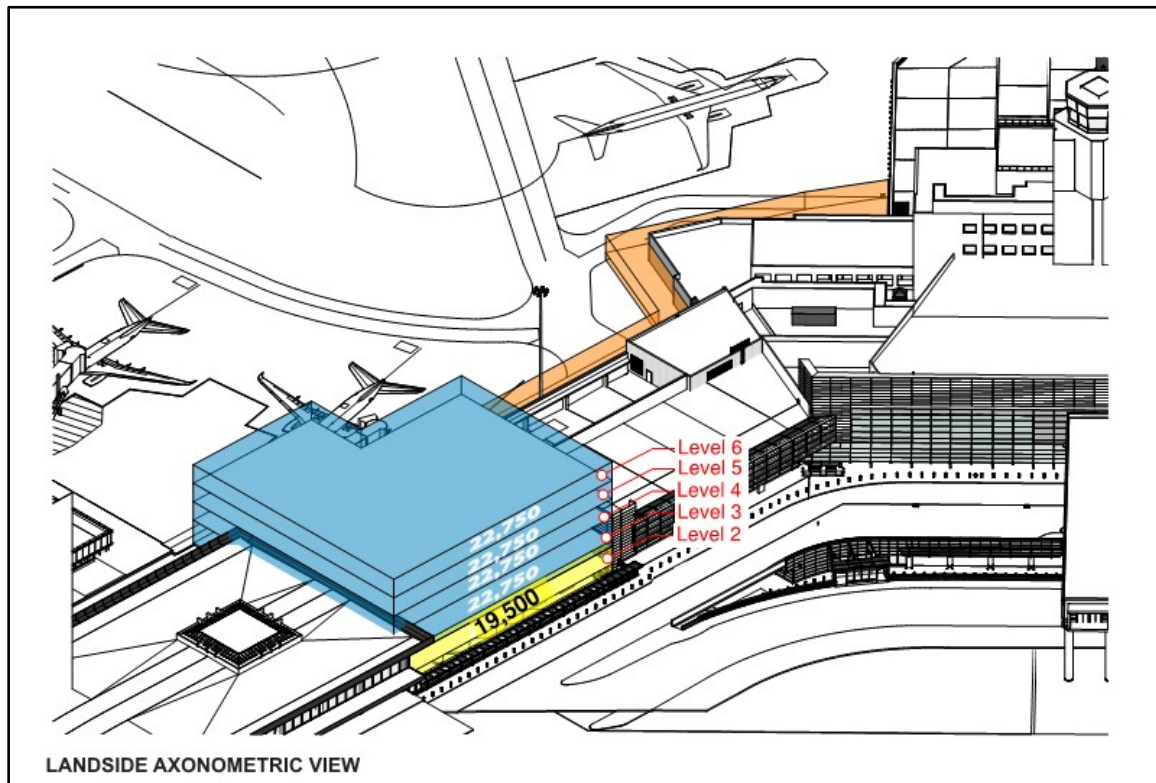


Figure 4. Proposed Courtyard 3 Connector Building and Pedestrian Bridge

³ San Francisco Green Building Ordinance, effective January 1, 2014. (Ordinance Number 259-13 was adopted November 5, 2013 and updated by Ordinance Number 229-15, effective January 1, 2017). Available online at: [http://library.amlegal.com/nxt/gateway.dll/California/sfbuilding/greenbuildingcode2013edition?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco_ca\\$sanc=JD_GreenBuilding](http://library.amlegal.com/nxt/gateway.dll/California/sfbuilding/greenbuildingcode2013edition?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$sanc=JD_GreenBuilding)

Table 1. Proposed Project Use by Level

Project Level	Proposed Use	Area (sf)
Level 1 / Ground (Arrivals)	Mechanical and System Support	2,000
Level 2 (Departures)	New Secure Passenger Connector Structure & Baggage Handling System	8,200
	New Security Screening Checkpoint	19,500
Level 3	New Office Space	22,750
Level 4	New Office Space	22,750
Level 5	New Office Space	22,750
Level 6	New Office Space	22,750
PROJECT TOTAL		118,700

Source: SFO Design and Construction, 2015.

Prepared by: SFO Bureau of Planning and Environmental Affairs, 2015.

Table 1 provides an overview of the project components by level, which are described in more detail below:

- **Level 1 – Ground Level (Arrivals).** The existing Courtyard 3 parking lot and service road would remain in place. A 2,000-square foot addition would be constructed on the airfield side of Terminal 2. The addition would be used for mechanical, utility, and communications systems support space and storage. Building support structures (4-foot by 4-foot piles) to elevate the proposed new building above Courtyard 3 would be located at the ground level.
- **Level 2 (Departures).** A 19,500-sf structure over Courtyard 3 would provide space for the relocation of four passenger security screening checkpoint lanes with Transportation Security Administration screening equipment from the Terminal 3 east lobby, the associated passenger queuing lanes, and post-security recompose areas for passengers. This area would also include a pre-security passenger walkway between Terminals 2 and 3 to replace the demolished walkway bridge.

An 8,200-sf, passenger walkway connector structure would extend along the airfield side of the departures level between Terminals 2 and 3 to provide a post-security passenger link between Terminals 2 and 3. The connector bridge would also include moving walkways and art installations. A new baggage handling system would also be installed under the connector bridge to facilitate inter-terminal transfers.

- **Levels 3 -6.** Levels 3-6 would each contain 22,750 sf of office space for Airport administration and critical support uses. These four levels would be constructed above

the new security screening checkpoint level and the existing Communications Center in Terminal 2.

Project Construction

Construction of the project would commence in the summer of 2017 and take approximately two years to complete. The construction timeline includes three months for demolition and site preparation, 20 months for building and connector construction, and two months for architectural coatings and paving. Demolition would include removal of the existing pre-security pedestrian connector structure between Terminals 2 and 3. Construction is anticipated to occur on weekdays generally from approximately 7:00 a.m. to 3:30 p.m. Night or weekend work, such as large material deliveries, may be required occasionally. Construction would not require any lane closures of adjacent roadways.

The Airport anticipates using the following equipment during project construction: trucks, tractors, loaders, backhoes, forklifts, aerial lifts, concrete saws, air compressors, welders, a torque pile driver, a trencher, asphalt and concrete trucks, pavers, and sweepers. Demolition of existing structures would require off-hauling of approximately 650 cubic yards of debris. Project construction would require the removal of approximately 300 cubic yards of soil, mostly for approximately 50 4-foot by 4-foot piles, driven to a depth of 10 feet, for the building foundation.

During the peak of construction, about 5 to 10 trucks would access the site daily for deliveries. Construction material staging would occur on the project site and other airport areas, if needed. Equipment and vehicle staging areas during construction would be provided. A construction workforce of approximately 22 workers is anticipated. Construction worker parking would be provided at an offsite airport location with a shuttle to the project site.

Project Operation

Upon completion of project construction, Airport security screening would occupy the departures level (Level 2) of the new building and the existing security screening checkpoint in the Terminal 3 east lobby would be decommissioned. Airport passengers would be able to transfer between Terminal 2 and Terminal 3 via the new secure connector without passing through additional security screening. Airport administrative staff and federal critical agency staff that currently occupy offices in the International Terminal Building and throughout the Airport would be relocated and consolidated in the new office space at the Courtyard 3 Connector building. No expansion of existing staffing is anticipated. Typical office operations would be between 7:00 a.m. to 7:00 p.m., five days a week; however, some emergency services (e.g., FBI, Police) may operate 24 hours per day/seven days per week. Approximately four new Airport employees are expected to perform general management, custodial, and security functions associated with the new office space.

Following the office consolidation, vacated spaces in the International Terminal Building and other SFO locations would be available for reuse. It is anticipated that, over a number of years, airline support offices and club lounges would gradually occupy these available spaces. Up to four new airline support offices and six club lounges could be accommodated. Each airline support office, which may operate 24 hours per day, seven days per week, would have approximately four employees, resulting in approximately 16 new airline support staff. Club lounges typically operate from 5:00 a.m. to 12:00 a.m. Each club lounge would likely require between 10 to 13 new employees, generating a total of 60 to 78 new airline employees. **Table 2** summarizes the potential future uses, hours of operation, and employees that may result over time following project implementation.

Table 2. Potential Future Project Operations and Staffing

Potential Future Uses	Hours of Operation	New Employees
SFO Courtyard 3 Connector Level 1	24 hours per day, seven days per week	0
SFO Courtyard 3 Connector Level 2 – security screening checkpoint and passenger walkways	24 hours per day, ⁴ seven days per week	0
SFO Courtyard 3 Connector Levels 3 to 6 – offices (new staff for building management, custodial and security only)	7:00 a.m. to 7:00 p.m.	4
Various SFO terminals - Airline Support Offices (up to 4 offices)	24 hours per day, seven days per week	16
International Terminal - Airline Club Lounges (up to 6 lounges)	5:00 a.m. to 12:00 am	60 - 78
Total		80 - 98

In sum, the proposed project could result in up to 80 to 98 new employees at SFO working different shifts covering the various hours of operation for the offices and club lounges.

⁴ The security queue would close for a few hours between 12:00 a.m. and 4:00 a.m.; the connector would remain open.

Required Approvals and Permits

The following is a list of approvals and permits required for completion of the Courtyard 3 Connector project:

Federal Approvals and Permits

- **Federal Aviation Administration (FAA)**, Approval of Airport Layout Plan and environmental processing under the National Environmental Policy Act (NEPA). As a federally obligated public use airport, SFO adheres to environmental reviews under NEPA in accordance with FAA Order 1050.1F and 5050.4B, Environmental Impacts: Policies and Procedures.⁵
- **FAA**, Air Traffic Division, Form 7460-1 Permit, Notice of Proposed Construction or Alteration to construct on airfield.

State Approval and Permit

- **San Francisco Regional Water Quality Control Board (RWQCB)**, Clean Water Act Section 402 Permit. In compliance with the Clean Water Act (CWA), the Airport has a National Pollution Discharge Elimination System (NPDES) permit, under Section 402 of the CWA, from the RWQCB and an associated Storm Water Pollution Prevention Plan (SWPPP) for the entire Airport. Construction of the proposed project would disturb more than one acre and would, therefore, require a site-specific SWPPP as part of a Construction General Permit.

Local Approvals and Permits

- **San Francisco Airport Commission**, Approval to issue design and construction bid
- **San Francisco Airport Design Review Commission**, Approval of design
- **San Francisco Arts Commission**, Approval of civic design
- **SFO Building Inspection and Code Enforcement (BICE)**, **Building Permit**. All plans, specifications, calculations, and methods of construction shall meet the code requirements found in the California Uniform Building Code and SFO standards in accordance with the Tenant Improvement Guide (TIG).⁶ The TIG stipulates all proposed

⁵ Federal Aviation Administration, Order 1050.1F, Environmental Impacts: Policies and Procedures, July 16, 2015. Available online: http://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050_1F.pdf. This document, and other documents referenced in this IS, is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2016-000857ENV.

⁶ The Tenant Improvement Guide (TIG) is applicable to all tenants and Airport facilities. San Francisco International Airport Commission, Facilities Operations & Maintenance, Bureau of Building Inspection

design be reviewed by SFO's Design Review Committee, Design and Construction division, and BICE division.

Per Chapter 31 Amendments to the CCSF Administrative Code, the Airport Commission's approval to issue a design and construction bid for the project would be the formal Approval Action.

B. PROJECT SETTING

B.1 Regional and Local Setting

The project site is located within SFO, approximately 13 miles south of downtown San Francisco. SFO's operational area is bordered by San Francisco Bay to the east and generally bordered by U.S. Highway 101 (U.S. 101) to the west and south. SFO is approximately 5,110 acres, of which approximately 2,110 acres are located on land east of U.S. 101, 180 acres are located west of U.S. 101, and 2,810 acres are over San Francisco Bay. SFO includes the terminal complex (project site location), runways, maintenance and repair facilities, storage warehouses, administrative buildings, and satellite parking areas. In addition to the administrative offices within the terminal complex, Airport staff offices occupy buildings on McDonnell Road and North Access Road, some of which are scheduled for renovation or reconstruction.

The Airport is surrounded by the cities of South San Francisco (to the north), San Bruno (to the west), and Millbrae and Burlingame (to the south). Existing land uses in the closest portions of the City of South San Francisco are generally industrial. In the City of San Bruno, the existing land use is predominantly single-family residential, with commercial uses generally concentrated along El Camino Real and San Mateo Avenue. This land use pattern continues southward into the City of Millbrae, with an increase in multi-family residential use in areas southwest of the Airport and U.S. 101. Large areas of commercial and light industrial use can be found southeast of the Airport in the City of Burlingame. The nearest parks to the project site include Bay Front Park (500 feet south of the airfield and adjacent to San Francisco Bay) and Bayside Manor Park (across U.S. 101 to the west of the Airport in Millbrae).

SFO was incrementally developed from 1927 to 1973 by filling portions of San Francisco Bay. The great majority of the upland area of SFO, such as the project site, is paved for use as runways, taxiways, aircraft aprons, and parking, or occupied by terminal buildings and hangars. An Airport-wide drainage system collects surface runoff throughout the airfield.

SFO is served regionally by U.S. 101 and Interstate 380. Locally, the Airport is served by North Access Road, South Airport Boulevard, San Bruno Avenue, Millbrae Avenue, North McDonnell Road, South McDonnell Road, and Old Bayshore Highway. Regional rail service is provided by Bay Area Rapid Transit (BART). The BART terminal is located in the Airport's International Terminal (SFO Airport Station) and connects transit riders to the East Bay, San Francisco, and

and Code Enforcement, Tenant Improvement Guide, April 1999. Available online:
<https://sfoconnect.com/tenant-improvement-guide>.

northern San Mateo County. The SFO Airport Station is accessible from any Airport terminal via the AirTrain, a fully automated people-mover system operated by SFO that runs between the Airport terminals, terminal parking garages, Rental Car Center, and BART/SFO Airport Station. BART also provides a connection to Caltrain, a commuter rail service running along the San Francisco Peninsula from San Francisco to San Jose, at the Caltrain/BART Millbrae Station. Bus service to the Airport is operated by San Mateo County Transit District (SamTrans), which runs a fixed-route bus service connecting the Airport to San Francisco, San Mateo County and portions of Palo Alto.

B.3 Other Projects in the Vicinity

Past, present, and reasonably foreseeable future projects occurring in the vicinity of the proposed project could result in cumulative impacts in combination with the SFO Connector project impacts. These projects include other SFO projects on Airport property as well as other projects identified by the local planning agencies in the project vicinity. A list of potential cumulative projects at the Airport and nearby vicinity is presented in **Table 3**. SFO projects that could have overlapping construction periods with the proposed project are shaded in Table 3. The discussion of potential cumulative impacts is included in the individual environmental issue area sub-sections within Section E.

**TABLE 3
PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS**

Count	Location	Project Name and Description	Anticipated Construction
1	101 Oyster Point Blvd, about 2.5 miles north of SFO property	Britannia Cove at Oyster Point, South San Francisco – A seven-building development totaling 1,030,344 sq. ft. of building space. Project includes 884,500 sq. ft. of office and research/development space, a 126,000 sq. ft. 200 room hotel including restaurant, 20,000 sq. ft. of retail, and an 8-story parking structure. Other on and off-site improvements are proposed.	2013-2019
2	127 Harris Ave, 1 mile north of SFO property	Fairfield Suites, South San Francisco – The Project would construct a five story, 128 room hotel with 96 parking spaces. Project has been approved by City of South San Francisco.	CEQA Complete; assume 2016-2019
3	1000 Gateway Blvd, about 2.25 miles north of SFO property	Gateway Business Park Master Plan Modification, South San Francisco – Modification to an existing phasing plan for a 451,485 square foot development at Gateway Business Park (Oyster Point Blvd and Gateway Blvd). Project would include 5-6 new buildings and 2-4 parking structures, including the demolition of existing buildings, on 22 acres to be completed between 2013 and 2025. South San Francisco published an EIR in 2010 for the project.	2013 – 2025
4	300 Airport Blvd, 2.5 miles southeast of SFO property	Burlingame Point, Burlingame – The project would include four office buildings and an amenities center building with a total of 767,000 sq. ft. of floor area on an 18.13 acre site located at 300 Airport Boulevard (also known as 350 Beach Road). Two 5-story buildings, one 7-story building, and one 8-story building are proposed. The 2-story amenities building would include a child care facility, an exercise facility and a café/break room. Parking would be provided in a 5.5-level parking structure, in a podium level parking area below the four office buildings, and in smaller parking lots scattered throughout the site.	Permits issued June 2012; design review amendment in August 2016. Assume 2016-2017.
5	Carolan Ave. and Rollins Rd., 1.5 miles south of SFO property	Carolan Avenue/Rollins Road Residential Development, Burlingame – Development of a 5.4 acre site with 290 residential units, associated parking, recreational facilities, and open space.	CEQA Complete 2015; assume 2016-2018
6	430-450 Airport Blvd., 2.5 miles south of SFO property	State Lands Commission Public Park, Burlingame – A nine acre section of land will be leased by the City of Burlingame from the California State Lands Commission to construct a public park, parking lot, restroom facilities, ornamental landscaping, and a trail.	CEQA Complete; assume 2016-2018
7	Millbrae BART Station, .25 miles west of SFO Property	Millbrae Station Area Specific Plan Update, Millbrae – The adoption and implementation of the Millbrae Station Area Specific Plan "Update" and associated General Plan and Zoning Ordinance Amendments; and 2) the approval and construction of the proposed Transit-Oriented Developments (TOD) #1 and #2 (together referred to as the proposed Project). The proposed Project would result in approximately 1,653,340 sf of office, 275,110 sf of retail space, 1,750 residential units, and 370 hotel rooms.	25 Year Plan; Start 2017

TABLE 3 (CONT)
PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS

Count	Location	Project Name and Description	Anticipated Construction
8	One mile west of SFO property	Crossing Hotel, San Bruno – Construction of a 152-room hotel on a 1.5-acre site. The hotel would be five-stories with 99,000 square feet of hotel area and 163 parking spots.	CEQA Complete 2015; assume 2016-2018
9	Closest segment is about 1 mile away across U.S.101 from Plot 2	Peninsula Corridor Electrification Project (CalTrain) – The project is the electrification of the CalTrain Peninsula Corridor from its current northern terminus at 4th and King Streets in San Francisco to approximately 2 miles south of the Tamien Station in San Jose, a total distance of approximately 51 miles. The project location includes the entire JPB-owned right of way (ROW) along this 51-mile segment, additional ROW for new facilities and operational requirements and for any construction or access areas located outside the ROW. This project does not include electrifying the corridor south of Tamien. The primary purposes of the project are to provide electrical infrastructure that will be compatible with separate later use for blended service, improve train performance, and reduce long-term environmental impact by reducing noise, improving regional air quality, and reducing greenhouse gas emissions.	Start 2019
10	On SFO Property	Plot 700 Development – Relocated ground transportation and shuttle bus / vehicle fueling and maintenance facility at what was used as United Airlines employee parking lot.	2016-2019
11	On SFO Property	Wastewater System Improvements – Update existing industrial and sewage systems at the Airport’s Mel Leong Treatment Plant.	2017-2019
12	On SFO Property	Long-Term Garage Development – Construct Long-term Parking Garage No. 2 at Airport Lot DD parking complex.	2017-2019
13	On SFO Property	Terminal 1 Redevelopment – Construct a new Boarding Area B at Terminal 1 to accommodate modern aircraft and security standards.	2016-2018
14	On SFO Property	Air Train Extension – Extension of the existing AirTrain track from its current termination point at the Rental Car Center to a new terminus at Lot DD.	2017-2019
15	On SFO Property	Terminal 3 Modernization (West) – Increase terminal lobby depth Boarding Areas E and F at Terminal 3 to accommodate modern passenger screening processes and equipment, and to provide sufficient lobby queuing space for the passenger screening area.	2019-2021
16	On SFO Property	Airport and US Coast Guard Shoreline Protection Enhancements – Identify and address shoreline enhancement opportunities in accordance with Federal Emergency Management Agency (FEMA) floodplain findings and climate action plans (i.e., sea wall construction, shoreline management, etc.).	2017-2019
17	On SFO Property	Super Bay Hangar Fire Protection – Renovation of the fire protection system including utility infrastructure, fire pump house structure, and water tanks at and adjacent to the Super Bay Hangar.	2017-2018
18	On SFO Property	Administration Facilities – Consolidation of Airport Commission offices and employee parking at an on-Airport location.	2016-2020

TABLE 3 (CONT)
PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS

Count	Location	Project Name and Description	Anticipated Construction
19	On SFO Property	Plot 2 Aircraft Remote Overnight Parking – Plot 2 Aircraft Remote Overnight Parking – Realign South McDonnell Road and construct remote overnight aircraft parking adjacent to International Terminal Boarding Area A.	2016-2017
20	On SFO Property	South Field Buildings Demolition –Demolish TWA Cargo, Delta Cargo, ground transportation unit building (where ground transportation providers at the Airport are permitted and inspected), Airport vehicle fueling station, and the temporary trailer building used by Airport Signage department. The existing cargo providers will be relocated to existing cargo facilities at the Airport. Relocate security checkpoint/airfield gate and the Emergency Response and Fire Station #3 westward on the same site to maximize airfield space.	2014-2016
21	On SFO Property	Airport Hotel – A 250,000 sq. ft. hotel building and associated AirTrain station at San Francisco International Airport. Pending project includes 403 guest rooms, associated hotel amenities, and approximately 200,000 sq. ft. of vehicle circulation and surface parking. A new AirTrain station would be constructed adjacent to the project to connect hotel patrons to the Airport terminals.	2017-2020
22	On SFO Property	Shoreline Protection Program – Enhancement of the existing shoreline protection elements along the perimeter of Airport property including the sea wall, rip rap, tide gates, and interior drainage system, to meet FEMA flood protection criteria.	2017-2021
23	On SFO Property	ASIG/Menzies Relocation – Relocation of ASIG and Menzies building from South Field demolition area to temporary buildings between Buildings 710 and 730.	2016

SOURCE: SFO Bureau of Planning and Environmental Affairs based on Office of Planning and Research CEQAnet, April 2016; and SFO Capital Plan Projects List 2014-15.

Note: Projects which may be constructed at SFO at the same time as the Courtyard 3 Connector project are shaded.

C. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	<i>Applicable</i>	<i>Not Applicable</i>
Discuss any variances, special authorizations, or changes proposed to the Planning Code or Zoning Map, if applicable.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section of the Initial Study discusses the compatibility of the proposed project with applicable zoning regulations and land use plans, and approvals and/or permits required from City departments other than the Planning and Building Inspection departments, or from regional, state, or federal agencies.

The proposed project would be entirely on Airport property, and would not change or affect the use of the land on which the Airport is situated. The project would not require the issuance of a variance, conditional use authorization, or changes to San Francisco's Planning Code or Zoning Map. Therefore, these issues are not discussed further in this document.

Adopted Plans, Policies, and Goals

San Francisco General Plan

The San Francisco General Plan sets forth the comprehensive long-term land use policy for the CCSF. The general plan consists of 10 issue-oriented plan elements: air quality, arts, commerce and industry, community facilities, community safety, environmental protection, housing, recreation and open space, transportation, and urban design. All land use documents, such as the Planning Code, area-specific plans, and redevelopment plans, must be consistent with the General Plan. The charter approved by the voters in November 1995 requires that the Planning Commission recommend amendments to the General Plan to the Board of Supervisors for approval. This approval changes the General Plan's status from an advisory to a mandatory document and underscores the importance of referrals establishing consistency with the General Plan before actions by the Board of Supervisors on a variety of actions.⁷ Plan elements relevant to the project are briefly described below.

- **Air Quality Element**—Promotes clean air planning through objectives and policies that ensure compliance with air quality regulations.
- **Commerce and Industry Element**—Guides decisions on economic growth and change in San Francisco. The three goals of the element—continued economic vitality, social equity

⁷ City and County of San Francisco, 1988. San Francisco General Plan. As amended through 1996. Available at: http://www.sf-planning.org/ftp/General_Plan/index.htm.

(with respect to employment opportunities), and environmental quality—address citywide objectives as well as those of San Francisco’s major economic sectors.

- **Community Safety Element**—Addresses potential geologic, structural, and nonstructural hazards to CCSF-owned structures and critical infrastructure, with the goal of protecting human life and property from such hazards.
- **Environmental Protection Element**—Addresses the impact of urbanization on the natural environment by promoting the protection of plant and animal life and freshwater sources and addressing the CCSF’s responsibility to provide a permanent clean water supply to meet present and future needs as well as to maintain an adequate water distribution system.
- **Transportation Element**—includes an objective promoting the CCSF as a major destination and departure point for travelers embarking on interstate, national, and international trips. Specific policies supporting this objective include Policies 5.1, 5.2, 5.3, and 5.4 promoting the expansion of SFO and improved regional links and increased transit options between SFO and surrounding communities. The proposed project would not conflict with this objective or any of its supporting policies.

Overall, there are no apparent inconsistencies between the San Francisco General Plan and the project. Any conflict between the project and General Plan policies that relate to physical environmental issues are discussed in Section E, Evaluation of Environmental Effects. As part of their determination to approve or disapprove the project, decision makers will consider the compatibility of the project with General Plan policies that do not relate to physical environmental issues. Any potential conflicts identified as part of that process would not alter the physical environmental effects of the project, as analyzed in this IS/MND.

San Francisco International Airport Master Plan

The San Francisco International Airport Master Plan (Master Plan), adopted by the Airport Commission in 1992, is a comprehensive planning and land use document guiding development of SFO in both near-term and long-range scenarios.⁸ The proposed developments outlined in the Master Plan include new and renovated terminal buildings, an inter-airport transit system, runway safety improvements, parking facilities, and various related projects. Since the Master Plan was adopted in 1992, many of the improvements have already been constructed. The proposed project was not specifically addressed in the Master Plan, but its location and proposed uses would not conflict with any of the goals and development projects in the Master Plan. Development of a new Master Plan is underway.

Draft San Francisco International Airport Development Plan

The Draft San Francisco International Airport Development Plan (ADP) is a long-range plan for SFO that defines recommended facility development activity that would accommodate long-term demand of 71.1 million annual passengers. The ADP also identifies Master Plan and other projects currently being considered or implemented to meet current and near-term operational requirements. The ADP provides guidance for identifying critical decision points in the

⁸ City and County of San Francisco, San Francisco International Airport Master Plan, Final Environmental Impact Report, certified May 28, 1992.

development execution timeline to advance or defer implementation of facility, infrastructure, and roadway projects under the recommended ADP.

County of San Mateo General Plan and Zoning

Although SFO is in unincorporated San Mateo County, it is owned and operated by the CCSF. The San Mateo General Plan and Zoning, last amended in 1986, includes general land use designations and policies pertaining to SFO. SFO is designated in the General Plan as the San Francisco International Airport Special Urban Area. The General Plan 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 includes transportation policies 12.41 through 12.44 supporting the Metropolitan Transportation Commission's Regional Airport Plan policies concerning growth at SFO and promoting the use of transit and improving ground transportation options. The proposed project would not conflict with any of these policies.

Under the San Mateo County Zoning Ordinance, last amended in 1999, SFO is zoned Light Industrial (M-1). The County's Zoning Ordinance permits a wide variety of industrial uses in the M-1 zoning district, including air transportation and related activities. The proposed project would be consistent with this zoning designation.

City of San Bruno General Plan

A small section of undeveloped Airport property immediately west of US 101 is within San Bruno city limits. The San Bruno General Plan has a general land use designation of Parks/Open Space for this area. The project site is not within the jurisdiction of the City of San Bruno; therefore, development of the project would not conflict with the San Bruno General Plan or its land use designations.

City of South San Francisco General Plan

The northern portion of SFO extending south of North Access Rd is in the city limits of South San Francisco. The South San Francisco General Plan land use designation for this portion of SFO is Mixed Industrial. The East of 101 Area Plan, a specific plan of the South San Francisco General Plan, provides objectives and policies to address and foster existing land uses and guide the future development of this area. This plan includes a discussion of the development constraints in the East of 101 Area, given the noise and height restrictions due to nearby aircraft operations at SFO. This plan does not currently include residential, mixed-use, or other proposed land uses that are incompatible in a location in and next to a major international airport. The project site is not within the South San Francisco city limits, and the operation of the proposed project would not impact any current or proposed land use objectives and policies either of the East of 101 Area Plan or the South San Francisco General Plan.⁹

⁹ City of South San Francisco. South San Francisco General Plan. Internet website:
<http://www.ssf.net/index.aspx?nid=360>.

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. 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 including:

- **Bay Area Air Quality Management District (BAAQMD)**, Bay Area 2010 Clean Air Plan.¹⁰ This comprehensive document updates the Bay Area 2005 Ozone Strategy, in accordance with the requirements of the California Clean Air Act, to implement feasible measures to reduce ozone and provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gases (GHGs) throughout the region.
- **The Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC)**, Plan Bay Area.¹¹ This is a long-range integrated transportation and land use/housing strategy through 2040 for the San Francisco Bay Area to meet the requirements of Senate Bill 375, which calls on each of the state's 18 metropolitan areas to develop a sustainable communities strategy to accommodate future population growth and reduce greenhouse gas emissions from cars and light trucks.
- **San Francisco Bay Regional Water Quality Control Board (RWQCB)**, Water Quality Control Plan for the San Francisco Bay Basin.¹² This is the RWQCB's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the state, including surface waters and groundwater, and includes programs of implementation to achieve water quality objectives.
- **San Francisco Bay Conservation and Development Commission (BCDC)**, San Francisco Bay Plan.¹³ The Bay Plan is BCDC's policy guide that designates development, recreation, and conservation uses in its jurisdiction around the San Francisco Bay shoreline and various supporting waterways and estuaries in accordance with the McAteer-Petris Act. The San Francisco Bay Plan, and the jurisdictional boundary of the BCDC, was amended in October 2011 to reflect climate change issues and anticipated sea level rise. SFO is designated a "priority use" in the Bay Plan. Priority uses include ports, water-related industry, airports, wildlife refuges, and water-related recreation.

¹⁰ Bay Area Air Quality Management District, Bay Area 2010 Clean Air Plan, adopted September 15, 2010. Available at: <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>. Accessed May 23, 2016.

¹¹ Association of Bay Area Governments and Metropolitan Transportation Commission, Plan Bay Area 2040, approved July 18, 2013. Available at: <http://www.planbayarea.org/the-plan/adopted-plan-bay-area-2013.html>. Accessed May 23, 2016.

¹² San Francisco Bay Regional Water Quality Control Board, Water Quality Control Plan for the San Francisco Bay Basin. Available at: http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.shtml. Accessed on May 23, 2016.

¹³ San Francisco Bay Conservation and Development Commission, San Francisco Bay Plan, 1969, as amended. Available at: <http://www.bcdc.ca.gov/pdf/bayplan/bayplan.pdf>. Accessed on May 23, 2016.

- **City/County Association of Governments (C/CAG)**, Airport Land Use Compatibility Plan (ALUCP). The C/CAG (of San Mateo County) has been designated as the Airport Land Use Commission for public use airports in San Mateo County and prepared the state-mandated ALUCP consistent with California Airport Land Use Planning Handbook and State of California Aeronautics Act guidance. The objective of the ALUCP is to ensure compatible and responsible development of the Airport and surrounding areas and prevent the creation of new noise and safety problems in the environs of the Airport.¹⁴

The proposed project would not obviously or substantially conflict with any such adopted environmental plans or policies.

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.

- | | | |
|---|--|---|
| <input type="checkbox"/> Land Use | <input type="checkbox"/> Air Quality | <input type="checkbox"/> Biological Resources |
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Wind and Shadow | <input type="checkbox"/> Hydrology and Water Quality |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Recreation | <input type="checkbox"/> Hazards/Hazardous Materials |
| <input type="checkbox"/> Transportation and Circulation | <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Mineral/Energy Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Public Services | <input type="checkbox"/> Agricultural and Forest Resources |
| | | <input type="checkbox"/> Mandatory Findings of Significance |

¹⁴ City/County Association of Governments of San Mateo County, *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. Available at: http://ccag.ca.gov/wp-content/uploads/2014/10/Consolidated_CCAG_ALUCP_November-20121.pdf. Accessed February 7, 2017.

E. EVALUATION OF ENVIRONMENTAL EFFECTS

This Initial Study examines the project to identify potential effects on the environment. For each item on the IS checklist, the evaluation has considered the impacts of the project both individually and cumulatively. All items on the IS checklist that have been checked “Less than Significant with Mitigation Incorporated,” “Less than Significant Impact,” “No Impact,” or “Not Applicable” indicate that, upon evaluation, staff has determined that the project could not have a significant adverse environmental effect relating to that issue. A full discussion is included for all items checked “Less than Significant with Mitigation Incorporated” and “Less than Significant Impact,” and a brief discussion is included for items checked “No Impact” or “Not Applicable.” The items checked above in Section D, Summary of Environmental Effects, have been determined to be “Less than Significant with Mitigation Incorporated.”

Environmental impacts are numbered throughout this IS using the section topic identifier followed by sequentially numbered impacts. If needed, mitigation measures are numbered to correspond to the impact numbers; for example, Mitigation Measure M-CP-1 addresses Impact CP-1. Cumulative impacts are discussed at the end of each environmental topic impact discussion and use the letter C to identify them; for example, Impact C-CP addresses cumulative cultural and paleontological resources impacts.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
1. LAND USE AND LAND USE PLANNING— Would the project:					
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project is entirely within the boundaries of SFO, more specifically within the Airport’s main terminal complex. SFO is in unincorporated San Mateo County and is surrounded by the cities of South San Francisco to the north/northwest, San Bruno to the west, and Millbrae to the south/southwest. San Francisco Bay is east of SFO.

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

The project would construct a new building and connector bridge on existing Airport property between Terminals 2 and 3. The project would not conflict with or disrupt existing or planned airport operations. The nearest established community is the City of Millbrae, which is separated from the project site by Airport property and U.S. 101. As such, there is no community physically

located within or immediately adjacent to the project site or on Airport property. Therefore, the project would not physically divide an established community and there would be no impact.

Impact LU-2: The project would be consistent with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)

The project site is located in unincorporated San Mateo County. Because the Airport is wholly owned and operated by the CCSF, it is not subject to the land use regulations of the municipalities within which it is situated.¹⁵

The policies of the San Francisco General Plan that address the Airport (Policies 5.1, 5.2, 5.3, 5.4, and 6.5 of the Transportation Element) are focused on Airport expansion and regional access to the Airport from surrounding communities, such as increased transit options. Regardless, these policies are not applicable to the proposed project because the Courtyard 3 Connector project would not involve expansion of the Airport or changes that would require improvements to Airport access. The proposed project would construct a land use ancillary to the primary use of SFO and would not conflict with any of these policies. The San Francisco Planning Code does not specifically address the Airport because it is not within the boundaries of the CCSF. Hence, the project would not conflict with applicable land use regulations of CCSF.

The California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region, provides regulatory oversight of soil and groundwater cleanup at the Airport to reduce the potential environmental effect of contamination from historical and current property uses on water quality. RWQCB Order No. 99-045 establishes cleanup standards for various risk management zones within the Airport.¹⁶ The RWQCB also regulates construction storm water discharges under the Clean Water Act. The proposed project would be compliant with Order No. 99-045 and the Clean Water Act, and therefore would not conflict with the RWQCB's regulations (refer to Section E.15, Hydrology and Water Quality and Section E.16, Hazards and Hazardous Materials for additional discussion).

Impact C-LU: The proposed project, in combination with past, present and reasonably foreseeable future projects at the Airport and project vicinity, would result in less-than-significant cumulative impacts on land use. (Less than Significant)

As discussed above, land use impacts related to division of an established community or conflicts with land use plans would either be “no impact” or not applicable, and therefore would not contribute to cumulative impacts regarding these criteria. With respect to potential impacts related to consistency with land use plans adopted to avoid or mitigate environmental impacts, the geographic scope of analysis is the Airport property, as airport uses and character are distinct

¹⁵ California Government Code Section 53090.

¹⁶ RWQCB, Order No. 99-045, *Adoption of Revised Site Cleanup Requirements and Rescission of Order Nos. 95-136, 95-018, 94-044, 92-152, and 92-140 for: The City and County of San Francisco, The United States Coast Guard, and San Francisco International Airport Tenants/Operators*. June 16, 1999.

from that of the surrounding cities. Past development in and around SFO resulted in a mixture of land uses that are compatible with present and planned SFO operations, as defined in the San Francisco International Airport Master Plan. Table 3 in Section B.2 lists past and present projects, either recently completed or under construction at the Airport, and reasonably foreseeable future projects that have either been approved and are awaiting construction, or are in the approval process. The Airport's recently completed, underway, or proposed projects would enhance safety features of aircraft operations, support airport expansion, and renovate existing facilities. These projects would be consistent with the existing Airport land use plans and regulations of the relevant agencies with oversight. Therefore, the proposed project, in combination with the past, present, and reasonably foreseeable future cumulative projects would not result in a significant cumulative impact on the character of the project vicinity (less than significant).

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
2. AESTHETICS—Would the project:					
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

An aesthetics or visual quality analysis considers the project design in relation to the surrounding visual character, heights, and building or structure types of surrounding uses, its potential to obstruct scenic views or vistas, and its potential for light and glare. A project would be considered to have a significant adverse environmental effect on visual quality only if it would cause a substantial, demonstrable negative change.

The project would be developed in an existing paved parking lot and developed area that does not contain any natural features such as vegetation, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting, so Initial Study Checklist criterion E.2 (b) is not applicable.

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

A scenic vista is generally considered to be a location from which the public can experience unique and exemplary high-quality views – typically from elevated and uninterrupted vantage points that offer panoramic views of great breadth and depth. Scenic vistas may be officially recognized or designated (e.g., within local planning documents or the Caltrans scenic highway program,) or they may be informal in nature (e.g., mountain peaks or coastal bluffs). For the purpose of this analysis, scenic vistas are views that are publically accessible and meet the definition of a scenic vista above.

The project would be developed between Terminals 2 and 3, replacing the existing pre-security connector between those buildings, and extending above a portion of the existing Terminal 2 structure. The project would be visible from the upper-level departures roadway loop adjacent to the site, however, views are somewhat obscured by a pedestrian walkway. Views of the project from the ground-level arrivals roadway loop would appear similar to the existing paved parking area, with additional support structures. San Francisco Bay is 0.7-mile from the project site, but is not visible from either roadway due to the intervening terminal complex structures and distance, thus, there are no views of scenic vistas in the immediate project vicinity.

The proposed Courtyard 3 Connector building height is approximately 122 feet, which would be several stories higher than the adjacent 55-foot-tall terminal buildings and lower than the nearby parking garage (the International Terminal Garage is approximately 140 feet in height). The project would introduce new vertical and horizontal lines and structures into the project area that would be consistent with the lines and shapes of the existing terminal complex. Views of the proposed building would be noticeable to Airport users and could possibly be glimpsed briefly by drivers on U.S. 101, although these highway views would be dominated by the elevated roadways and parking structure in the foreground, other Airport buildings and structures. Long range views toward the Airport available from the surrounding hills in the cities of San Bruno, Millbrae, Burlingame and San Mateo can be characterized as having a scenic view of San Francisco Bay and the East Bay Hills, with the Airport in the foreground. The proposed project would be consistent with the existing visual character of the Airport and would not substantially alter these existing views. Therefore, project impacts on scenic vistas would be less than significant.

Impact AE-2: The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. (Less than Significant)

The proposed project would be developed at the SFO terminal complex, where the visual character is dominated by Airport facilities, including the terminal buildings, parking garages, control tower, elevated and surface-level roadways, the elevated AirTrain tracks, and the airfield pavement. The proposed building would be consistent with the existing visual character of the Airport. U.S. 101 would continue to function as a visual border between the Airport to the east and the residential neighborhoods to the west of U.S. 101. The existing highway viaducts and parking garage would generally obscure the new structure. Given the distance between the

proposed project site, the flat topography, as well as these intervening visual features, there would be limited views of the project from residential areas to the west and would blend into the surrounding airport complex. The proposed project would therefore have a less-than-significant impact on the existing visual character or quality of the site and its surroundings.

Impact AE-3: The proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area or that would substantially impact other people or properties. (Less than Significant)

The proposed building's appearance would be similar to nearby Airport buildings. Building design and materials standards are established in the Airport's Tenant Improvement Guide (TIG),¹⁷ and incorporate finishes that would not encumber flight and/or safety operations. According to these guidelines,¹⁸ windows would be a tampered solargray glass that would not create a new source of substantial glare.

The proposed project would include interior lighting of Airport areas and offices. Interior lighting of the proposed security checkpoint and connector on the departures level would be similar to that in the adjacent terminal buildings. Offices on the upper levels would be illuminated, although many of the offices would not be occupied in the evening hours, and would employ energy-saving devices to minimize night-time lighting. Regardless, the interior lighting would not introduce a new source of substantial light in the area due to the solargray glass windows that would diminish its effect. Exterior lighting installations would require approval on the basis of visual and electronic compatibility with Airport operations.¹⁹ Building-mounted light fixtures would be confined to highlighting specific features such as entrances, covered walks or stairs.²⁰ The addition of the proposed night lighting would be consistent with the existing Airport terminal complex lighting and would not be substantial or adverse. The closest residential area is approximately 0.3 mile (1,500 feet) to the west across US 101. This distance, combined with the intervening highway and structures, would dissipate the project's light effects. As discussed above, the proposed project would be generally indistinguishable from nearby Airport structures at a distance from the hillsides in the nearby municipalities. Therefore, the proposed project would not introduce a new source of substantial light or glare that would adversely affect day or nighttime views in the area or that would substantially affect other people or properties. This impact would be less than significant.

¹⁷ San Francisco International Airport Facilities Operations & Maintenance (FOM) Building Inspection and Code Enforcement, *Tenant Improvement Guide*, April 1999. Available online: <https://sfoconnect.com/tenant-improvement-guide>.

¹⁸ *Ibid*, Article 512.D.3

¹⁹ *Ibid*, Article 303.2.F

²⁰ *Ibid*, Article 403.2.d

Impact C-AE: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would result in less-than-significant aesthetics impacts. (Less than Significant)

The geographic scope of aesthetic impacts on scenic vistas and views that could be affected by new sources of light and glare includes Airport properties and nearby areas along the margin of San Francisco Bay that can be viewed from public viewpoints on the hillsides in the nearby municipalities. The project, when combined with other past, present, and reasonably foreseeable projects could potentially result in significant cumulative impacts on these aesthetic resources if cumulative projects introduced a number of exceedingly large, brightly illuminated or reflective structures in the low-lying shoreline areas that disrupted distant views. There are no scenic vistas viewable from the project site itself or in the nearby, relatively flat vicinity. Only three SFO projects listed in Table 2 would construct new structures more than several stories tall that might be observed from these distant viewpoints: the proposed Administration Facilities, Airport Hotel, and Long-term Garage. These projects would be adjacent to structures of similar size (e.g., the proposed 13-story hotel is approximately the same height as the International Terminal Garage) and, therefore, would not introduce substantial new vertical elements into the viewshed that could affect scenic vistas. Further, these projects would be subject to the same design and material standards as the proposed project, so that they would not be substantial sources of light and glare. The four bayside developments in the nearby cities listed on Table 3 (Brittania Cove, Fairfield Suites, Gateway Business Park, and Burlingame Point) are located more than two miles from the project site and in developed areas. For these reasons, the project in combination with other past, present, and reasonably foreseeable future projects in the area would not result in a significant cumulative aesthetic impact on scenic vistas and views (less than significant).

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
3. POPULATION AND HOUSING— Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact PH-1: The proposed project would not induce substantial population growth in an area, either directly or indirectly. (Less than Significant)

CEQA Guidelines Section 15064(e) notes that economic or social change by itself would not be considered a significant effect on the environment. Population growth is considered in the context of local and regional plans and population, housing, and employment projections. Generally, a project that induces population growth is not viewed as having a significant impact on the environment unless this growth is unplanned and results in significant physical impacts on the environment. Thus, the growth and changes in employment and population, and potential demand for housing that would occur with implementation of the proposed project would not be adverse physical impacts in themselves. However, the physical changes needed to accommodate project-related improvements may have physical impacts on the environment. The proposed project does not include the development of residences, new roads or related infrastructure that would remove an obstacle to growth in the area. Therefore, the project would not directly induce population growth.

As discussed in Table 2, the proposed office consolidation would make space available in the International Terminal Building for new airline support offices and club lounges. These uses are anticipated to result in approximately 80 to 100 new employees at the Airport, as presented in Table 2. An increase of up to 100 new employees, relative to the Airport-related workforce of 36,800, would be imperceptible, and could be readily accommodated by the available workforce in the Bay Area; it would not necessitate the relocation of individuals to the project vicinity. Similarly, it is expected that the construction workforce requirements could be met using Bay Area labor and that construction workers would commute from elsewhere in the Bay Area rather than relocate from other areas. Although some employees or construction workers may relocate from other areas, the number of such employees would be minute compared to the total population and available housing stock in the San Francisco Bay Area, thus, it would not generate a substantial, unplanned population increase. As such, the project would not directly or indirectly induce population growth in the area and the impact would be less than significant.

Impact PH-2: The proposed project would not displace substantial numbers of housing units or people or create demand for additional housing, necessitating the construction of replacement housing. (Less than Significant)

The proposed project would not displace any people or housing because the project site within the Airport terminal complex. The project could result in approximately 100 new employees at the Airport, which would readily be accommodated by the available Bay Area workforce and housing. The project would not result in a substantial demand for additional housing units, necessitating the construction of new housing; therefore, the project would have a less-than-significant impact related to the displacement of housing units or the demand for additional housing the area.

Impact C-PH: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would result in less than significant population and housing impacts. (Less than Significant)

Construction and operation of the proposed project, when combined with other past, present, and reasonably foreseeable projects, would not result in a cumulatively considerable increase in population growth, displace housing units or people, or create a demand for additional housing. As discussed in Section A, direct employment at the Airport accounted for 36,800 jobs. The addition of up to 100 new jobs at the Airport would be insubstantial relative to the existing employment and population of the area. As a result, the proposed project's contribution to any potential cumulative impacts would be less than significant.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
4. CULTURAL RESOURCES—Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Article 10 and Article 11 of the San Francisco Planning Code pertain to individual city landmarks and historic districts, and to conservation districts located in the city's downtown core area (C-3 zoning districts), respectively. Because the proposed project would not include improvements in C-3 districts, and there is no designated city landmark or historic district with the SFO property boundary, Articles 10 and 11 would not apply to the proposed project.

Impact CR-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5. (No Impact)

A property is considered a historical resource under CEQA if it is listed in a local, state, or national register, or if it meets the evaluative criteria for listing used by the California Register of Historical Resources (CRHR). To be eligible for the CRHR, a historic resource must be significant at the local, state, and/or federal level under one or more criteria related to: association with significant historical events associated with California's history and cultural heritage; association with lives of persons important in our past; distinctive characteristics of design/construction methods or representative of the work of an important creative individual; or, potential to yield important information in prehistory or history. It also must retain enough integrity to be recognizable as a historical resource and to convey its significance.

The SFO terminal buildings were constructed between 1954 and 2000. Terminal 2 (Central or Main Terminal) was built in 1954, and substantially remodeled to become the International Terminal in the early 1980s. Terminal 1 (South Terminal) was constructed in 1963 and renovated in several stages, reopening in the late 1980s. Terminal 3 (North Terminal) was built in 1979 and is less than 45 years old and therefore too young to be considered an historical resource.

Multiple historical resources surveys of the Airport structures have been completed and found Terminal Buildings 1 and 2 ineligible for either the National Register or CRHR due to ongoing alterations and lack of integrity.^{21,22,23} The State Historic Preservation Officer concurred with this finding on June 2011.²⁴ Based on its review of this information, the San Francisco Planning Department has determined that the SFO terminal buildings are not historical resources individually or as part of an historic district as defined by CEQA.²⁵ For these reasons, the project would cause no impact on a historical resource.

Impact CR-2: The proposed project could cause a substantial adverse change in the significance of an archeological resource, pursuant to Section 15064.5. (Less than Significant)

Various factors considered in order to determine the potential for encountering archeological resources include location and depth of soils disturbance resulting from the proposed project, as well as the geomorphic evolution and history of the project site. Information about documented archeological resources in the area can also be of predictive value. The project would require

²¹ David Chavez & Associates, *Cultural Resources Evaluation for the San Francisco International Airport Master Plan*, February 1991.

²² Environmental Science Associates, *Final Historical Resources Report: Information Regarding the Eligibility of Properties at San Francisco International Airport for Inclusion on the National register of Historic Places or the California Register of Historic Places*, December 8, 2000.

²³ Environmental Science Associates and Carey & Co., *Final Historical Resources Report Addendum*, July 27, 2001.

²⁴ State Historic Preservation Officer Milford Wayne Donaldson, *Letter to FAA Alaska Region regarding Relocation of Airport Traffic Control Tower, San Francisco International Airport*, June 20, 2011.

²⁵ San Francisco Planning Department Senior Preservation Planner Tina Tam, *Preservation Team Review Form*, May 30, 2016.

installation of approximately 47 4-foot by 4-foot piers to a depth of 10 feet below existing surface grade for construction of the proposed structure. This would result in approximately 300 cubic yards of excavated material. The excavation associated with the proposed project would be confined to the layer of imported fill material used to reclaim this portion of San Francisco Bay and the deposit of Young Bay Mud that underlies the imported fill, both of which are of low to very low archeological sensitivity. The San Francisco Planning Department archeologist determined that no known archeological resources are present and that there is a low likelihood of encountering buried archeological resources. The site of the San Francisco International Airport, east of Highway 101, in general, is considered to be of low potential for legally-significant archeological resources except at greater depths where Middle Holocene prehistoric deposits may be present from a time when the bay shoreline (paleoshoreline) was at a much lower elevation.²⁶ Because the subsurface disturbance associated with project construction would be limited to shallow fill material, the potential to encounter and cause a substantial adverse change in the significance of archaeological resources would be very low and this impact is considered less than significant.

Impact CR-3: The proposed project could disturb human remains, including those interred outside of formal cemeteries. (Less than Significant)

Under state law, human remains and associated burial items may be significant resources in two ways: (1) they may be significant to descendent communities for patrimonial, cultural, lineage, and religious reasons; and (2) they may be important to the scientific community, such as prehistoric archaeologists and physical anthropologists. CEQA and state regulations concerning Native American remains provide procedural requirements to assist in avoiding potential adverse effects to human remains with the contexts of their value to both descendants and the scientific community.

As discussed above under Impact CR-2, the background research by the Planning Department's archeologist indicates a very low likelihood of encountering archeological resources in the project site, including archeological resources that could contain human remains. Therefore, the proposed project's impacts with regard to potential disturbance of human remains is considered less than significant.

Impact CR-4: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074. (Less than Significant) Planning Department consultation with Native American tribal representatives pursuant to AB 52 to date has resulted in the finding that a proposed project site containing a documented prehistoric site or potentially containing such a site may be considered to potentially contain a tribal cultural resource and that those Native American tribal representatives who have entered into an agreement for tribal cultural resource consultation shall be given the opportunity to request such consultation regarding the proposed project. Because the Planning Department archeologist has determined that the proposed project would not affect a prehistoric

²⁶ San Francisco Planning Department, Memorandum from Randall Dean, Staff Archeologist, to Jeanie Poling, San Francisco Planning Department, November 6, 2015.

archeological resource, the proposed project is not expected to affect a tribal cultural resource and this impact would be less than significant.

Impact C-CR: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would result in less-than-significant cultural resources impacts. (Less than Significant)

The geographic scope of potential cumulative impacts on cultural resources encompasses the project site and nearby areas. As described above, there are no historic architectural resources within the project site. All cumulative projects identified in the vicinity (see Table 3) are assumed to cause some degree of ground disturbance during construction and thus contribute to a potential cumulative impact on buried cultural resources.

Background research suggests that the potential for the project to encounter archaeological resources, including human remains, would be low. Further, the Planning Department's archeologist has determined that projects involving soil disturbance within SFO, east of Highway 101 and south of the North Access Road lack the potential to affect legally-significant archeological resources except at great depths.²⁷ The cumulative SFO projects in Table 3, therefore, would be considered to have less-than-significant cumulative impacts on archeological resources. Other projects in shoreline areas of nearby cities are likely to also be situated on fill material. In addition, all projects would be subject to federal and state regulations intended to avoid or reduce effects on buried archeological resources. For these reasons, the proposed project and cumulative development in its vicinity would not result in a significant cumulative impact on archeological resources, human remains, and tribal cultural resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
5. TRANSPORTATION AND CIRCULATION— Would the project:					
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

²⁷ Ibid.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site is within the SFO main terminal complex, accessible by the Airport loop road and by a restricted-access vehicle service road along the airfield adjacent to the terminal buildings. The main roadways that provide access to the terminal complex are McDonnell Road, South Airport Boulevard, San Bruno Avenue, Millbrae Avenue, and U.S. 101 and I-380. U.S. 101 exits directly into the Airport loop road that circles the terminal complex. McDonnell Road is located immediately adjacent and to the east of U.S. 101. North McDonnell Road extends from the terminals to San Bruno Avenue and South Airport Boulevard, approximately one mile north in San Bruno. South McDonnell Road extends from the terminals to Millbrae Avenue, approximately one mile to the south. McDonnell Road is four lanes, with two lanes for traffic moving south to north, one lane for traffic moving north to south, one transitional turning lane serving traffic in both directions, and Class II bicycle lanes.²⁸ Class II bike lanes are defined as a portion of the roadway, generally five to seven feet wide, designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. South Airport Boulevard is a north-south street that generally parallels US 101, extending north from San Bruno Avenue and provides access to U.S. 101, I-380, and South San Francisco. South Airport Boulevard is generally a four-lane roadway with two lanes in each direction. San Bruno Avenue is a two-way, east-west street extending from South Airport Boulevard west to Skyline Boulevard. It is four-lanes, two lanes in each direction, and provides a direct access to US 101 in both northbound and southbound directions.

²⁸ City/County Association of Governments of San Mateo County, *San Mateo County Comprehensive Bicycle and Pedestrian Plan*, September 8, 2011.

The Bay Area Rapid Transit (BART) system provides rail transit to the SFO International Terminal from Bay Area cities. The SFO Airtrain is an automated people mover that connects the BART station with the terminal complex and rental car center. Five San Mateo County Transit District (SamTrans) bus routes (140, 292, 397, 398 and KX) serve the SFO terminal complex, San Francisco and Peninsula communities. Four of these routes access the main terminal via McDonnell Road and the lower-level Airport loop road, with dropoff/pickup points at the center island at Terminal 2; courtyards at International Boarding Areas A and G; Airport Building 575; the intersection of West Field Road and North McDonnell Road; at the intersection of West Field Drive and North McDonnell Road; and adjacent to long-term employee parking Lot D. SamTrans route 140 uses San Bruno Avenue to connect with the SFO airtrain near the rental car center. The CalTrain San Bruno station is approximately one mile to the north and also served by the SamTrans buses to SFO.

Vehicle Miles Traveled in San Francisco and the Bay Area

Many factors affect travel behavior. These factors include density, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development at great distance from other land uses located in areas with poor access to non-private vehicular modes of travel generate more automobile travel compared to development located in urban areas, where a higher density, mix of land uses, and travel options other than private vehicles are available. Vehicle miles traveled (VMT) measures the amount and distance that a project might cause people to drive, accounting for the number of passengers within a vehicle.

Given these travel behavior factors, the VMT ratio varies throughout the nine-county San Francisco Bay Area region and throughout the City of San Francisco itself. These areas of the City can be expressed geographically through transportation analysis zones. Transportation analysis zones are used in transportation planning models for transportation analysis and other planning purposes. The zones vary in size from single city blocks in the downtown core, multiple blocks in outer neighborhoods, to even larger zones in suburban areas.

The San Francisco County Transportation Authority (Transportation Authority) uses the San Francisco Chained Activity Model Process (SF-CHAMP) to estimate VMT by private automobiles and taxis for different land use types. Travel behavior in SF-CHAMP is calibrated based on observed behavior from the California Household Travel Survey 2010-2012, census data regarding automobile ownership rates and county-to-county worker flows, and observed vehicle counts and transit boardings. SF-CHAMP uses a synthetic population, which is a set of individual actors that represents the Bay Area's actual population, who make simulated travel decisions for a complete day. The Transportation Authority uses a tour-based analysis for office and residential uses, which examines the entire chain of trips over the course of a day, not just trips to and from the project.

For office development, Bay Area regional average daily work-related VMT per employee is 19.1. The Airport is located within transportation analysis zone (TAZ) 1239. In TAZ 1239, the VMT per employee is 22.2,²⁹ as shown in **Table 4**, Daily Average Vehicle Miles Traveled.

Table 4. Daily Average Vehicle Miles Traveled

<u>Land Use</u>	<u>Bay Area</u>		<u>TAZ 1239</u>
	<u>Regional Average</u>	<u>Regional Average minus 15%</u>	
Employment (Office)	19.1	16.2	22.2

Vehicle Miles Traveled Impact Analysis Methodology

In January 2016, the State Office of Planning and Research (OPR) published for public review and comment a *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA* recommending that transportation impacts for projects be measured using a VMT metric.³⁰ On March 3, 2016, based on compelling evidence in that document and on the City's independent review of the literature on level-of-service and VMT, the San Francisco Planning Commission adopted OPR's recommendation to use the VMT metric instead of automobile delay to evaluate the transportation impacts of projects (Resolution 19579). (Note: the VMT metric does not apply to the analysis of impacts on non-automobile modes of travel such as riding transit, walking and bicycling.) Accordingly, the transportation analysis presented below does not contain a discussion of automobile delay impacts.

According to the impact assessment methodology adopted by the Planning Commission, a project would have a significant transportation effect on the environment if it would cause substantial additional VMT. OPR's proposed transportation impact guidelines recommend screening criteria to identify types, characteristics, or locations of projects that would not result in significant impacts related to VMT. OPR recommends that if a project or land use proposed as part of a project meets any of the following screening criteria, VMT impacts are presumed to be less than significant for that land use and a detailed VMT analysis is not required. The screening criteria applicable to the proposed project and how they are applied in San Francisco are described as follows:

- Map-Based Screening - Map-Based-Screening is used to determine if a project site is located within an area (TAZ) that exhibits low levels of VMT, defined as 15 percent or more below

²⁹ San Francisco County Transportation Authority, Drew Cooper, personal communication, December 7, 2016.

³⁰ Governor's Office of Planning and Research, *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*, January 20, 2016. Accessed August 10, 2016 at: https://www.opr.ca.gov/docs/Revised_VMT_CEQAGuidelines_Proposal_January_20_2016.pdf.

the regional average. As documented in OPR's proposed transportation impact guidelines, a 15 percent threshold below existing development is "both reasonably ambitious and generally achievable."³¹ This approach is consistent with CEQA Section 21099 and the thresholds of significance for other land uses recommended in OPR's proposed transportation impact guidelines. For office projects, such as the proposed project, a project would generate substantial additional VMT if it exceeds the regional VMT per employee minus 15 percent.

- Small Projects – OPR recommends that lead agencies may generally assume that a project would not have significant VMT impacts if the project would either: (1) generate fewer trips than the level for studying consistency with the applicable congestion management program or (2) where the applicable congestion management program does not provide such a level, fewer than 100 vehicle trips per day. Projects that generate few trips will also generally tend to generate low VMT. The San Francisco Transportation Authority's Congestion Management Program does not include a trip threshold for studying consistency.³² Therefore, the Planning Department generally uses the 100 vehicle trip per day screening criterion as a level where projects would typically not generate a substantial increase in VMT.
- Proximity to Transit Stations. OPR recommends that residential, retail, and office projects, as well projects that are a mix of these uses, proposed within 0.5 mile of an existing major transit stop (as defined by CEQA Section 21064.3) or an existing stop along a high-quality transit corridor (as defined by CEQA Section 21155) would not result in a substantial increase in VMT. However, this presumption would not apply if the project would (1) have a floor area ratio of less than 0.75; (2) include more parking for use by residents, customers, or employees of the project than required or allowed, without a conditional use; or (3) is inconsistent with the applicable Sustainable Communities Strategy.³³

Travel Demand

Project implementation is anticipated to result in 80 to 100 new employees after Airport and agency staff are consolidated in the new office building from various office spaces in the main terminal complex and those vacated spaces are redeveloped as airline club lounges or offices. Future employees would commute to/from SFO at differing times, mostly during off-peak hours, to accommodate the typical hours of operation of club lounges (5:00 am to 12:00 am) and airline support offices (24 hours per day). The proposed project would therefore generate an estimated 160 to 200 daily person trips for employee travel to and from SFO. Based on the results of a recent

³¹ This document is available online at: https://www.opr.ca.gov/s_sb743.php, page III:20.

³² San Francisco Transportation Authority Board, *San Francisco 2015 Congestion Management Plan*, December 15, 2015. Available online at: http://www.sfcta.org/sites/default/files/content/Planning/CongestionManagementPlan/2015/CMP_2015_FINAL.pdf

³³ A project is considered to be inconsistent with the Sustainable Communities Strategy if development is located outside of areas contemplated for development in the Sustainable Communities Strategy.

SFO employee commute survey, approximately 72 percent of SFO and tenant employees drive to work alone, 13 percent take BART, and the rest commute by other means including carpool, vanpool, Samtrans, airport shuttles, walking and biking.³⁴ Assuming the same commute behavior for future employees, the project is estimated to generate approximately 120 to 150 one-way vehicle trips per day.³⁵ Similarly, the project is estimated to result in approximately 25 to 35 transit trips per day, which would be spread throughout the day to accommodate the anticipated range of work schedules.

Impact TR-1: The proposed project would not cause substantial additional VMT. (Less than Significant)

One or more of the OPR screening criteria discussed above would apply to the project, indicating that the project is presumed to generate less-than-significant levels of VMT.

The Proximity to Transit Stations criterion would apply to the proposed office project, as it would be located within 0.5 mile of an existing major transit stop.³⁶ The SFO terminal complex is served by the BART rail transit station and five SamTrans bus routes. The SFO BART stop is a major transit stop with a service interval of 15 minutes or less during the peak commute periods.³⁷ The project does not have a floor area ratio less than 0.75 or include any parking, and the proposed project is not inconsistent with *Plan Bay Area*. Therefore, the proposed project would comply with the Proximity to Transit Stations criterion and would not generate a substantial increase in VMT and this impact is considered less than significant.

The Small Projects screening criterion is considered generally applicable to the proposed project. The proposed Courtyard 3 Connector building itself would not generate new vehicle trips upon initial occupancy; it is the conversion of the vacant terminal spaces to airline offices and club lounges that could occur over the next ten or more years that would result in new employees. The maximum number of vehicle trips generated by the project, estimated to be between 120 to 150 vehicle trips per day (including carpools), is relatively close to the 100 vehicle trip screening criterion, and is based upon a conservative estimate of potential future employees that could occur over the next ten years or more, depending upon expected future reuse of vacated office spaces in the main terminal complex. Moreover, the trip generation estimates for potential future employees were developed on the basis of information from the 2016 employee commute survey, while future commute travel will be influenced by new and continued SFO Transit First

³⁴ SFIA, *Preliminary Report: 2016 Tenant and Commission Employee Commute Survey*, April 2016.

³⁵ According to the SFO 2015 Climate Action Plan, in 2013, 8 percent of employees used a carpool or vanpool to commute to SFO. This estimate also assumes that roughly half of those future employees who commute by carpool or vanpool, or 4 percent of future employees, would travel via new carpools or vanpools (the other half may join existing SFO carpools and vanpools.)

³⁶ A “major transit stop” means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (CEQA Section 21064.3).

³⁷ BART, *Fares and Schedules*, February 2016.

initiatives that are intended to reduce employee vehicle trips as part of SFO's 2015 Climate Action Plan.

As discussed further below in Section E.8, Greenhouse Gas Emissions, SFO has set ambitious goals for sustainability as outlined in the SFO 2015 Climate Action Plan³⁸ and Five Year Strategic Plan (2017 – 2021).³⁹ As part of its sustainability program, the SFO Transit First Policy is intended to promote alternatives to driving by SFO employees, employees of airlines, airline support services, and concessionaires. Transit First measures to reduce greenhouse gas emissions include transit incentives, reduced BART fares, commuter payroll deductions or payment of a portion of transit or vanpool expenses, and new employee briefings. Transit First measures have helped reduce the number of employees who drive alone to work by 8 percent and increased the number who take public transit by at least 5 percent since 2013.⁴⁰ Several new initiatives have been implemented or are being developed that have the potential to further reduce employee vehicle trips. The Airport has added bicycle lanes on major roadways and installed bicycle storage facilities at terminal-area locations to promote and support bicycle commuters.⁴¹ The Airport also facilitates employee access to carpool and vanpools by providing a matching program encompassing both SFO and tenant employees.⁴² The 2016 employee commute survey is one component of Transit First, gathering information needed to identify relevant approaches for reducing employee vehicle trips. Future Transit First initiatives are anticipated to continue reducing employee VMT over time. Even if airline club expansion into vacant terminal office spaces over the next ten years or more proceeds as conservatively assumed, the number of estimated employee vehicle trips may be fewer than the number estimated using 2016 commute behavior, and possibly less than the 100 trips per day criterion. Given the relatively low number of estimated vehicle trips, the uncertainty with regard to future redevelopment of terminal spaces, and the potential for reduction of future employee vehicle trips under SFO Transit First policies, the proposed project would also be generally considered a Small Project that would not cause substantial additional VMT.

Impact TR-2: The proposed project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, nor would it conflict with an applicable congestion management program. (Less than Significant)

Parking

San Francisco does not consider parking supply as part of the permanent physical environment and does not consider changes in parking conditions to be environmental impacts as defined by

³⁸ SFIA, *2015 SFO Climate Action Plan*, May 2016.

³⁹ SFIA, *Five-Year Strategic Plan 2017-2021*, not dated.

⁴⁰ Based on a comparison of a 2013 employee commute survey data in the *2015 SFO Climate Action Plan* and the 2016 commute survey referenced above.

⁴¹ SFIA, *Bike to SFO*, <https://www.flysfo.com/to-from/biking>. March 2017.

⁴² SFIA, *SFO Connect, Discounts & Perks*. <https://sfoconnect.com/community/discounts/transit-parking>. March 2017

CEQA. Parking conditions are not static, as parking supply and demand varies from day to day, from day to night, from month to month, etc. The availability of parking spaces (or lack thereof) is not a permanent physical condition, but changes over time as people change their modes and patterns of travel. Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment. Environmental documents should, however, address the secondary physical impacts that could be triggered by a social impact. (CEQA Guidelines § 15131(a)).

As discussed above, the proposed project would result in up to 80 to 100 new employees, which would be expected to result in 115 to 144 new vehicle trips per day and increased demand for parking. The Airport has numerous parking facilities that could readily accommodate potential parking demand. The availability of parking to meet employee demand would preclude the secondary environmental impact of drivers searching for parking resulting in potential conflicts with bicyclists, pedestrians, and other traffic.

Loading

The proposed project would not increase the number of airline passengers and; therefore, would not increase demand for curbside passenger loading spaces within the terminal complex. Future office staff would continue to park in designated employee parking areas and/or take public transit. The offices would serve airline and agency staff only for internal Airport functions; no outside visitors to the offices are expected. As such, the project would not alter the demand for curbside passenger loading at the terminals. The proposed office uses are not expected to require freight loading.

Construction Activities

During the approximately two-year construction period, the proposed project would generate approximately 40 to 50 one-way construction worker trips and 5 to 10 one-way truck trips each weekday, depending on the phase of construction. Given the construction schedule of 6:30 a.m. to 3:30 p.m., construction worker trips would be prior to the morning peak commute period (7:00 a.m. to 9:00 a.m.). Truck trips would likely occur throughout construction hours, although large deliveries would likely be scheduled during the evening hours. Construction generally would not occur on weekends or holidays.

Construction staging would be on the project site and in available Airport property. Project construction could require lane closures on the interior Airport loop road occasionally for a few hours between 2:00 a.m. and 10:00 a.m. According to the Airport TIG the contractor would develop a traffic plan in coordination with SFO Landside Operations and/or Airfield Operations services.⁴³ The contractor and the SFO Facilities Operations and Maintenance Division staff would also have a pre-construction conference to receive advice on special hazards and all restrictions related to vehicular movement and access. Then the contractor would develop a

⁴³ SFIA, Tenant Improvement Guide, Section 203.2 B.12. 1999.

traffic, storage, and parking plan for approval from BICE.⁴⁴ The required coordination and oversight of construction vehicle traffic by SFO staff would minimize disruptions on Airport roadways.

During construction, temporary and intermittent transportation impacts could result from truck movements and construction worker vehicles travelling to and from the project site. Trucks are anticipated to use US 101, I-380, San Bruno Avenue, South Airport Boulevard, and McDonnell Road to access the site. The Airport discourages construction traffic on the terminal curbside loop, and construction vehicles are expected to primarily access the project site from AOA vehicle service road. Given the proximity of the site to the freeway, truck trips on local roads would be limited. Throughout the construction period, there could be a potential for a temporary reduction of the capacities of local streets due to the slower movement and larger turning radii of construction trucks, which would affect both existing vehicle traffic and transit operations. The number of daily truck trips would range between 5 and 10 truck round trips (10 to 20 total trips) depending upon the construction phase. These trips would be spread throughout the day, including the off-peak hours. Therefore, the construction-related traffic impacts would be considered less than significant.

Although construction traffic associated with the proposed project would result in less-than-significant impacts, the project sponsor may adopt **Improvement Measure I-TR, Construction Traffic Control Plan** to reduce potential impacts on traffic flows on roadways affected by project construction.

Improvement Measure I-TR—Coordinated Construction Traffic Control Plan

SFO shall ensure that the construction contractor prepares and successfully implements a construction traffic control plan that would include project-specific measures to reduce potential impacts on traffic flows on roadways affected by project construction and other Airport projects under construction concurrently with the proposed project. These roadways are US 101, I-380, South Airport Boulevard, San Bruno Avenue, and North McDonnell Road. SFO and construction contractors would also coordinate with local jurisdictions, transit agencies, Caltrans, and the public, on affected roadways and intersections. The traffic control plan shall include the following to the extent applicable:

- Flaggers or signs would guide vehicle and other traffic (pedestrian and bicycles) through or around the construction zone.
- The contractor would maintain access for emergency response vehicles at all times.
- Truck routes designated by cities and counties would be identified in the traffic control specifications. Haul routes should minimize truck traffic on local roadways and residential streets. For project work that requires oversized or excessive load vehicles on the State Highway System, the contractor would be responsible for obtaining a Transportation Permit from Caltrans.

⁴⁴ Ibid, Section 601.1, 601.2

- Large truck and delivery trips shall be scheduled outside the peak morning and evening commute hours, and outside on-site peak traffic hours for airport passenger loading.
- Construction, particularly related to lane closures, would be coordinated with local transit service providers.
- On-going and up-to-date information relating to the construction schedule and affected roadways and intersections, particularly lane closures, and a contact person, should be provided to the public, through timely press releases or other media messaging.
- Where it is feasible and safe to do so, existing pedestrian and bicycle access and circulation would be maintained at all times. If access and circulation cannot be maintained, detours would be designated and posted for pedestrians and bicyclists.
- All construction equipment and materials would be stored in designated contractor staging areas on or adjacent to the worksite on Airport property, in a manner that minimizes obstruction of traffic.
- Public roadways would be repaired or restored to their original conditions upon completion of construction.
- The traffic control plan would conform to the *California Manual on Uniform Traffic Control Devices: Part 6, "Temporary Traffic Control."* Traffic plans may require Caltrans, San Mateo County, SFO Traffic Engineering, and city review or approval.

Impact TR-3: The proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels, obstructions to flight, or a change in location, that results in substantial safety risks. (Less than Significant)

As required by State law, the Comprehensive Airport Land Use Compatibility Plan (ALUCP) for the environs of SFO addresses height restrictions and airspace projection to protect the navigable airspace around the Airport for the safe and efficient operation of aircraft in flight.⁴⁵ The ALUCP designates safety compatibility zones on Airport property and in the vicinity. The main terminal (including the project site) is not located within the runway protection zone or other safety compatibility zone. The ALUCP also outlines the policies for evaluating proposed land uses with respect to airspace protection to minimize potential safety hazards that could be created through the construction of tall structures, such as the proposed project. As discussed in the ALUCP, Federal Regulation Title 14 Part 77, "Safe, Efficient Use and Preservation of the Navigable Airspace" governs the Federal Aviation Administration's (FAA's) review of proposed construction exceeding certain height limits, defines airspace obstruction criteria, and provides

⁴⁵ City and County of San Mateo, *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*, November 2012.

for FAA aeronautical studies of proposed construction. Due to the height of the proposed project, the building would be subject to FAA review and oversight.⁴⁶

In accordance with this regulation, the Airport would submit a Notice of Proposed Construction or Alteration (Form 7460-1) to the FAA, which would determine the potential effect of the proposed construction on air navigation and identify mitigation measures, if necessary, to ensure that the project would not cause an obstruction that results in substantial safety risks. The FAA would issue a “Determination of No Hazard to Air Navigation” upon concluding that the proposed construction would not have a substantial aeronautical impact to air navigation. The State Department of Transportation and local agencies have the authority to prohibit structures that would obstruct the airspace so as to create an unsafe condition for aircraft in flight.⁴⁷ Therefore, the FAA must determine that the proposed project would cause no hazard in order to receive State and local agency approval for construction. With compliance with these regulations, the proposed project would not result in a change in air traffic patterns and the potential safety risk would be less than significant.

Impact TR-4: The proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. (Less than Significant)

The proposed project would be constructed above the Courtyard 3 parking lot and airfield access route; it would not change the roadway configuration or access to the Courtyard, or introduce incompatible uses to this area. The proposed building would be elevated on piers above the existing parking lot and access route, which would reduce the daylight in this area. Conditions would be similar to being under an elevated roadway or in a parking garage. The project includes lighting features to illuminate the parking lot, as needed. Therefore, the project would have a less-than-significant impact related to transportation hazards due to a design feature or resulting from incompatible uses.

Impact TR-5: The proposed project would not result in inadequate emergency access. (Less than Significant)

The street network and secure airfield vehicle service road currently provide access to the project site for emergency vehicles. Under the proposed project, emergency vehicles would access the project site as under existing conditions. There would be no new obstructions or changes to road geometry that would decrease the response time or access for emergency vehicles.

During construction, access would be maintained for emergency vehicles at all times. Emergency vehicles on nearby local roadways could be momentarily slowed when coinciding with a construction truck movement. However, construction activities would not prevent emergency vehicles from using any roads or accessing any facilities in the project vicinity.

⁴⁶ Ibid, Exhibit IV-10, FAA Notification Form 7460-1 Filing Requirements

⁴⁷ Ibid. Appendix F. Also, State Aeronautics Act (Article 2.7, Regulation of Obstructions, Section 21656)

For these reasons, the proposed project would not result in inadequate emergency access and this impact would be less than significant.

Impact TR-6: The proposed project would not conflict with adopted policies, plans, or programs regarding public transit or bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. (Less than Significant)

Transit Conditions

The proposed project would result in up to 80 to 100 new employees that would commute to SFO at varying times, likely during non-peak commute hours, throughout the day and evening. A portion of these employees would commute by transit. Assuming future employees have the same commute patterns as the current overall SFO employee travel behavior,⁴⁸ the project would generate about 25 to 35 transit trips per day, which would be distributed among BART train and SamTrans lines throughout the day. The additional riders generated by the project could be accommodated on BART and the multiple SamTrans lines (140, 292, 397, 398, and KX) that operate within close proximity to the project site. These bus and rail lines provide access between the project site, San Francisco, the East Bay, and the Peninsula. Because the project would not result in a substantial contribution to existing ridership levels, the proposed project's transit impacts would be less than significant.

It should be noted that transit-related policies include, but are not limited to: (1) the City's "Transit First" policy, established in the City's Charter Section 16.102; and (2) SFO's Transit First policy. The proposed project would not conflict with transit operations as discussed above and also would not conflict with the transit-related policies established by the City's Transit First Policy. Therefore, impacts to the City's transit network as a result of the proposed project would be considered less than significant.

Bicycle Conditions

The project would not alter existing bicycle facilities, including bicycle parking for employees in the project area, or conflict with bicycle routes and potential improvements to the bicycle network. Bicycle parking is provided in the SFO International Terminal and bicycle riding is discouraged on the Airport loop road due to safety considerations. The project would not affect the circulation on bicycle lanes on roadways near the project. Although the project would result in a small increase in the number of vehicles on roadways in the project area, this increase would be insignificant relative to the overall traffic and would not substantially alter traffic operations or create new conflicts with bicycle travel near the project. Thus, the project's impacts on bicycle conditions in the project vicinity would be less than significant.

⁴⁸ SFIA, *Preliminary Report: 2016 Tenant and Commission Employee Commute Survey*, April 2016. Approximately 15 percent of employees commute by BART.

The *San Mateo County Comprehensive Bicycle and Pedestrian Plan* includes goals and objectives to encourage bicycle use in the county, describes the existing bicycle route network and identifies improvements to achieve the established goals and objectives. McDonnell Road is a designated Class 2 bicycle route near the project site.⁴⁹ The proposed project would maintain adequate bicycle access and parking in SFO facilities and, therefore, would not conflict with the *San Mateo County Bicycle Plan*, or other plan, policy or program related to bicycle use.

Pedestrian Conditions

In the main terminal area, pedestrian circulation is provided by walkways inside the terminal buildings and connectors and an exterior sidewalk varying between 10 and 30 feet wide adjacent to the terminals on the loop road on Levels 1 and 2. The sidewalk is also used for passenger drop-off and pickup. The Courtyard 3 Connector project would provide a new pre-security walkway within the new building (replacing the existing connector bridge) and a new post-security connector bridge between Terminals 2 and 3. This would increase walkway areas and allow passengers to connect seamlessly throughout the terminal complex, reducing congestion in the pre-security walkways, the exterior sidewalks, and the security checkpoints.

The project would not substantially affect pedestrian conditions on the loop road sidewalks in terminal areas or on the nearby roadways. Existing Airport employees that currently work in various offices throughout the main terminal complex would continue to either take pedestrian walkways from the central parking garage and Airtrain platforms or take the employee shuttle bus from remote employee parking facilities. Similarly, new employees would have direct access to the new Airline offices and club lounges in the main terminal. The existing sidewalk width would have adequate capacity to accommodate anticipated pedestrian traffic. As such, the proposed project would result in a less-than-significant impact on pedestrian facilities.

Construction Impacts

The project would demolish the existing pre-security pedestrian walkway structure between Terminals 2 and 3 to make space for the new connector building. During the approximately two year construction period, passengers transferring from Terminal 2 to Terminal 3 would need to use the exterior sidewalks. Similar to recent construction projects at the main terminal,⁵⁰ the Airport would provide a covered walkway between the terminals that would also serve as a safety barrier from curbside traffic. Project construction would not otherwise affect transit, bicycle and pedestrian conditions in the project area, and project construction would have less-than-significant impacts on these facilities.

⁴⁹ CCAG, *San Mateo County Comprehensive Bicycle and Pedestrian Plan*, Adopted September 8, 2011.

⁵⁰ SFO Bureau of Planning and Environmental Affairs, Avant Ramsey, personal communication, September 13, 2016.

Impact C-TR-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a considerable contribution to cumulative regional VMT. (Less than Significant)

VMT, by its very nature, is largely a cumulative impact. The VMT associated with past, present, and future projects contribute to physical secondary environmental impacts. It is likely that no single project by itself would be sufficient in size to prevent the region or state from meeting its VMT reduction goals. Instead, a project's individual VMT contributes to cumulative VMT impacts. The VMT project-level thresholds are based on levels at which new projects are not anticipated to conflict with state and regional long-term greenhouse gas emission reduction targets and statewide VMT per capita reduction targets set for 2020. Therefore, because the proposed project would not exceed the project-level screening criteria for VMT (Impact TR-1), the proposed project would not be considered to result in a cumulatively considerable contribution to VMT impacts.

In addition, as discussed above under Impact TR-1, SFO's adopted Climate Action Plan and Five Year Strategic Plan incorporate strategies to reduce greenhouse gas emissions. These strategies include the Transit First program intended to reduce VMT by SFO employees, tenants and passengers. Implementation of these measures would reduce the cumulative VMT impacts in the project vicinity.

Impact C-TR-2: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in significant transportation impacts. (Less than Significant)

The geographic scope of the transportation analysis encompasses the roadway system that provides access to the main terminal complex, primarily the Airport loop road, McDonnell Road, South Airport Boulevard, San Bruno Avenue, Millbrae Avenue, and U.S. 101 and I-380. As indicated in Table 3, project construction and operation could occur within the same vicinity and time frame as other planned projects. Table 3 identifies 14 projects at the Airport that may be constructed during the same period as the proposed project. Two of these projects, the Administration Facilities and Long-Term Garage, have the potential to result in additional vehicle trips to the Airport during operation. Construction and operation of the proposed project would contribute incrementally to cumulative transportation impacts resulting from concurrent construction of cumulative projects in the same geographic area and from long-term project operations.

Cumulative Transit Impacts

The analysis of cumulative transit utilization considers foreseeable changes in local and regional transit service in the future, such as BART and SamTrans service changes due to the SFO Transit First program, and the growth in ridership based on future development in the vicinity. Cumulative transit impacts could potentially occur if transit ridership increased above the capacity of the local transit providers. Cumulative Airport projects, such as the Administration Facilities and the Airport Hotel, as well as the Millbrae Station Area Specific Plan Update and the

Burlingame Point development, would contribute to increased ridership on BART and SamTrans routes utilized by future project employees. It appears unlikely that a cumulative impact on transit would result from implementation of these projects. Regardless, the proposed project's contribution to the regional transit trips is so low that it would not be cumulatively considerable and this impact would be less than significant.

Cumulative Bicycle and Pedestrian Impacts

Bicycle and pedestrian impacts are by their nature site-specific and generally do not contribute to cumulative impacts from other development projects. Bicycle trips throughout San Mateo County may increase under the cumulative scenario due to general growth. Bicycle trips generated by the proposed project would include few bicycle trips to and from SFO bicycle parking facilities and a nominal number of pedestrian trips from parking areas and transit stops. However, as stated in the project analysis, the proposed project would provide adequate bicycle access and parking and would therefore not conflict with the County's *Comprehensive Bicycle and Pedestrian Plan*, or any other plan, policy or program related to bicycle use. Thus, development on the project site in combination with future developments in the area would result in a less-than-significant cumulative impact on bicycle and pedestrian facilities.

Cumulative Loading Impacts

Loading impacts are by their nature localized and site-specific; therefore, the loading impact identified for the proposed project would not contribute to cumulative impacts from other development projects near the project site. Accordingly, the proposed project in combination with past, present and reasonably foreseeable developments, would not result in significant cumulative loading impacts.

Cumulative Impacts on Air Traffic Patterns and Safety

With compliance with regulations regarding height limits and construction in navigable airspace, the proposed project would have less-than-significant impacts on air traffic patterns and aircraft safety. Other projects within the navigable airspace areas and height limits would be subject to the same regulatory framework, which would reduce the potential for aircraft navigation flight hazards. Accordingly, the proposed project, in combination with other projects within the SFO navigable airspace, would result in a less-than-significant cumulative impact on air traffic patterns and safety.

Cumulative Transportation Hazards related to Design Features or Inadequate Emergency Access

Due to the site-specific design of the proposed project, there would be no significant cumulative transportation impact from increased hazards due to design features or incompatible uses from construction of the cumulative projects identified. The project would have less-than-significant impacts on emergency access to the project site and would not reduce access to other Airport or

nearby location, thus it would not contribute considerably to any potential cumulative impact related to emergency access (less than significant).

Cumulative Construction Impacts

As shown on Table 3, there are a number of projects that may be constructed at the same time as the proposed project. Roadways in the vicinity of the Airport could experience an increase in traffic volumes due to concurrent construction activities, which could substantially worsen traffic conditions. Construction of each Airport project would require staging areas for material and construction worker parking, increase truck trips for hauling of excavation/demolition debris and building material deliveries, and add construction worker vehicle trips to the roadway network. Potential effects of additional construction related-vehicles, detours and lane restrictions from potentially overlapping and concurrent projects could increase potential traffic hazards for drivers, bicyclists, and pedestrians affected by the proposed project. However, all SFO projects would be subject to the same TIG requirements that stipulate the contractor prepare a traffic, storage, and parking plan that considers the other projects under construction at the same time. This plan would be reviewed and coordinated by the SFO BICE division. With adherence to these TIG requirements, the cumulative construction traffic would not conflict with an applicable transportation plan or congestion management program, decrease the safety of transit, bicycle or pedestrian facilities, or result in inadequate emergency access (less than significant).

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
6. NOISE—Would the project:					
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Topics:	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 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Be substantially affected by existing noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SFO is a public airport and there is no private airstrip located in the vicinity of the project site; therefore, Initial Study Checklist criterion E.6(f) is not applicable.

Noise Conditions in the Project Area

The proposed project is located within the Airport's main terminal complex. The largest contributors to noise in the project vicinity are aircraft noise and automobile traffic on U.S. 101 and the surrounding roads. The SFIA Comprehensive Airport Land Use Compatibility Plan (ALUCP) identifies noise compatibility zones at the Airport and vicinity based on year-round noise measurements, the Community Noise Equivalent Level (CNEL). The CNEL is a calculated 24-hour average noise level in a given area. The CNEL noise contours specify areas of average ambient noise in decibel (dBA)⁵¹ units. According to the noise exposure map, the project site is within the 65 and 70 dBA noise contours.⁵²

The proposed project site is surrounded by the airfield, the Airport loop road, Terminals 2 and 3, and airport parking. The nearest sensitive receptors⁵³ are residential areas approximately 3,800 feet to the southwest and are separated from the site by the Airport parking garage, the International Terminal Building, and US 101, which also generates an increased level of noise near the corridor. There are no other sensitive receptors (i.e., hospitals, schools, childcare facilities) near the project site.

⁵¹ Decibels (dB) provide a relative measure of sound intensity. The unit is based on mathematical powers of 10, or a logarithmic scale, to give a manageable range of numbers to encompass the wide range of human hearing response, from the standard threshold of hearing to the threshold of pain at ten trillion times the intensity. The term dBA refers to the average decibel level over a 24-hour period.

⁵² City/County Association of Governments of San Mateo County, California, *Comprehensive Land Use Plan for the Environs of San Francisco International Airport*, November 2012.

⁵³ Residences, libraries, religious facilities, hospitals, and schools are considered to be land uses that are more sensitive to noise.

Impact NO-1: The proposed project would not expose persons to or generate noise levels in excess of standards established in the local general plan or of noise ordinances or applicable standards of other agencies. (Less than Significant)

The Airport and the associated aircraft operators are subject to FAA noise control regulations including Airport sponsored noise monitoring in surrounding communities.^{54,55} Areas surrounding the Airport are subject to noise control policies in the ALUCP, which limit some types of development in certain noise compatibility zones. Development plans made by the San Francisco Airports Commission are subject to review by the Airport Land Use Commission (ALUC); however, the ALUC has no authority over the operation of the Airport. Commercial development, such as offices, are consistent with ALUCP land use compatibility policy without any special requirements related to the attenuation of aircraft noise, regardless of the CNEL.⁵⁶ Therefore, the proposed office uses would be consistent with the ALUCP noise/land use compatibility criteria at this location. Further, the security screening checkpoint and office building uses would not generate substantial noise. Thus, project operation would not expose persons to or generate noise levels in excess of ALUCP standards. This impact would be less than significant.

The types of construction equipment that would be used by the project are listed in Section A, Project Description. These include tractors, loaders, backhoes, forklifts, cranes, aerial lifts, air compressors, torque pile driver, cement mixer, pavers and rollers. The proposed equipment types are expected to generate maximum noise levels ranging from about 76 dBA to 84 dBA (the maximum sound level) at a distance of 50 feet from the source.⁵⁷ SFO construction contract specifications include noise control requirements that would reduce construction noise. These require contractors to: (1) muffle and shield intakes and exhausts, shroud or shield impact tools, and use electric-powered rather than diesel-powered equipment, as feasible near the terminal complex; (2) determine appropriate times for pile driving; and (3) construction noise barriers around the site or stationary equipment, such as compressors, as feasible if barriers would reduce noise by at least 5 dBA less than ambient noise caused by aircraft operations.⁵⁸ Due to the required construction noise controls, the project site's distance from sensitive receptors and the existing noise environment, construction-related noise is not anticipated to exceed ambient noise levels at the closest sensitive receptors and this impact would be less than significant.

⁵⁴ Federal Aviation Administration. 14 CFR Part 150, Airport Noise Compatibility Planning

⁵⁵ Federal Aviation Administration. 14 CFR Part 161, Airport Noise and Access Restrictions

⁵⁶ City/County Association of Governments of San Mateo County, California, *Comprehensive Land Use Plan for the Environs of San Francisco International Airport*, Noise/Land Use Compatibility Criteria, Table IV-1. November 2012.

⁵⁷ U.S. Department of Transportation, Federal Highway Administration, Construction Noise Handbook, 9.0 Construction Equipment Noise Levels and Ranges, Table 9.1, RCNM Default Noise Emission Reference Levels and Usage Factors. Available at: https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/

⁵⁸ SFIA, Construction Contract Specifications, August 2015

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

Groundborne noise is that which is experienced inside a building or structure from vibrations produced outside of the building and transmitted as ground vibration between the source and receiver. Groundborne noise can be a problem in situations where the primary airborne noise path is blocked, such as in the case of a subway tunnel passing near homes or other noise-sensitive structures. However, the project's noise and vibration generating construction activities would not involve tunneling or underground construction. Instead, it would use techniques that generate airborne noise and surface vibration. Therefore, no impacts are expected from construction-generated groundborne noise. The discussion below relates to impacts from groundborne vibration.

The types of equipment that would be used during project construction would be unlikely to result in excessive groundborne vibration. Pile driving for the building foundation would be performed using a torque pile driver, rather than a vibratory hammer, which would reduce potential vibration levels. Given the nearest sensitive receptor is more than one half mile away, these areas are unlikely to be affected by any groundborne vibration resulting from project construction. Further, project operation would not result in any groundborne vibration. For these reasons, the impact would be less than significant.

Impact NO-3: The proposed project would not result in a substantial temporary or permanent increase in ambient noise levels in the project vicinity above existing levels without the project. (Less than Significant)

As discussed above, the ambient noise levels in the project vicinity are generated primarily by aircraft traffic at the Airport and vehicle traffic on U.S. 101. The proposed security screening and office uses are not likely to alter or exceed existing ambient noise levels. Therefore, this impact would be less than significant.

Construction for the proposed project could periodically increase ambient noise levels in close proximity to the project site; however, given the distance between the project site and the nearest sensitive receptor, the intervening structures, and existing levels of roadway noise, the proposed project would not substantially increase ambient noise beyond current levels and this impact is considered less than significant.

Impact NO-4: The proposed project would not expose people residing or working within two miles of the Airport to excessive noise levels and would not be substantially affected by existing noise levels. (Less than Significant)

The proposed project is located on a public airport and, as discussed above under Impact NO-1, would not result in substantial temporary or periodic increases in ambient noise levels. The proposed project would cause no increase in aircraft operations or number of passengers at the

Airport, or other activity that would lead to significant increases in noise levels for people residing or working within two miles of the Airport. As discussed above in Impact NO-1, proposed office uses would be compatible with noise levels per the ALUCP. Further, the California Green Building Standards Code Section 5.507, Environmental Comfort, provides prescriptive methods for acoustical control measures and building materials that would attenuate noise in buildings constructed within the 65 CNEL contour of an Airport, including airport buildings. These standards require building construction to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent of 50 dBA in occupied areas during any hour of operation.⁵⁹ Therefore, the project would not be considered to expose people working or residing in the area, or future site occupants, to excessive noise levels. For these reasons, this impact would be less than significant.

Impact C-NO: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would result in less than significant cumulative noise impacts. (Less than Significant)

The geographic scope of cumulative noise impacts includes the area within which sensitive receptors are affected by Airport noise. The proposed project and other cumulative development in the project vicinity listed in Table 3 consist primarily of commercial developments, administrative facilities, and airport improvements. None of these projects would increase aircraft operations, increase passenger levels, or otherwise contribute to substantial increases in the noise environment surrounding the Airport. Accordingly, under the cumulative scenario, no significant noise impact would result and this impact would be less than significant.

⁵⁹ California Building Standards Commission, *California Green Building Standards Code 2013*, Available at: <https://www.documents.dgs.ca.gov/bsc/calgreen/2013-california-green-building-standards-code.pdf>. Accessed February 7, 2017.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
7. AIR QUALITY—Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

Overview

The Bay Area Air Quality Management District (BAAQMD) is the regional agency with jurisdiction over the nine-county San Francisco Bay Area Air Basin (SFBAAB), which includes San Francisco, Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and Napa Counties and portions of Sonoma and Solano Counties. The BAAQMD is responsible for attaining and maintaining air quality in the SFBAAB within federal and state air quality standards, as established by the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA), respectively. Specifically, the BAAQMD has the responsibility to monitor ambient air pollutant levels throughout the SFBAAB and to develop and implement strategies to attain the applicable federal and state standards. The CAA and the CCAA require plans to be developed for areas that do not meet air quality standards, generally. The most recent air quality plan, the *2010 Clean Air Plan*, was adopted by the BAAQMD on September 15, 2010. The *2010 Clean Air Plan* updates the *Bay Area 2005 Ozone Strategy* in accordance with the requirements of the CCAA 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 2010 Clean Air Plan contains the following primary goals:

- Attain air quality standards;
- Reduce population exposure and protect public health in the San Francisco Bay Area; and

- Reduce greenhouse gas emissions and protect the climate.

The *2010 Clean Air Plan* represents the most current applicable air quality plan for the SFBAAB. Consistency with this plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of air quality plans.

Criteria Air Pollutants

In accordance with the state and federal CAAs, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), 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. In general, the SFBAAB experiences low concentrations of most pollutants when compared to federal or state standards. The SFBAAB is designated as either in attainment⁶⁰ or unclassified for most criteria pollutants with the exception of ozone, PM_{2.5}, and PM₁₀, for which these pollutants are designated as non-attainment for either the state or federal standards. By its very nature, regional air pollution is largely a cumulative impact in that no single project is sufficient in size to, by itself, result in non-attainment of air quality standards. Instead, a project's individual emissions contribute to existing cumulative air quality impacts. If a project's contribution to cumulative air quality impacts is considerable, then the project's impact on air quality would be considered significant.⁶¹

Land use projects may contribute to regional criteria air pollutants during construction and operation. **Table 5** identifies air quality significance thresholds followed by a discussion of each threshold. Projects that would result in criteria air pollutant emissions 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 SFBAAB.

⁶⁰ "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.

⁶¹ Bay Area Air Quality Management District (BAAQMD), *California Environmental Quality Act Air Quality Guidelines*, May 2011, page 2-1.

Table 5
Criteria Air Pollutant Significance Thresholds

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	

Ozone Precursors. As discussed previously, the SFBAAB is currently designated as non-attainment for ozone and particulate matter. 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 (NO_x). The potential for a project to result in a cumulatively considerable net increase in criteria air pollutants, which may contribute to an existing or projected air quality violation, are based on the state and federal Clean Air Acts emissions limits for stationary sources. To ensure that new stationary sources do not cause or contribute to a violation of an air quality standard, BAAQMD Regulation 2, Rule 2 requires that any new source that emits criteria air pollutants above a specified emissions limit must offset those emissions. For ozone precursors ROG and NO_x, the offset emissions level is an annual average of 10 tons per year (or 54 pounds (lbs.) per day).⁶² These levels represent emissions below which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants.

Although this regulation applies to new or modified stationary sources, land use development projects result in ROG and NO_x emissions as a result of increases in vehicle trips, architectural coating and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of land use projects and those projects that result in emissions below these thresholds would not be considered to contribute to an existing or projected air quality violation or result in a considerable net increase in ROG and NO_x emissions. Due to the temporary nature of construction activities, only the average daily thresholds are applicable to construction phase emissions.

⁶² BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 17.

Particulate Matter (PM₁₀ and PM_{2.5}).⁶³ The BAAQMD has not established an offset limit for PM_{2.5}. However, the emissions limit in the federal New Source Review (NSR) for stationary sources in nonattainment areas is an appropriate significance threshold. For PM₁₀ and PM_{2.5}, the emissions limit under NSR is 15 tons per year (82 lbs. per day) and 10 tons per year (54 lbs. per day), respectively. These emissions limits represent levels below which a source is not expected to have an impact on air quality.⁶⁴ Similar to ozone precursor thresholds identified above, land use development projects typically result in particulate matter emissions as a result of increases in vehicle trips, space heating and natural gas combustion, landscape maintenance, and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of a land use project. Again, because construction activities are temporary in nature, 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 dust⁶⁵ and individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.⁶⁶ The BAAQMD has identified a number of BMPs to control fugitive dust emissions from construction activities,⁶⁷ which are included in the SFO construction contract specifications.⁶⁸ These required BMPs are an effective strategy for controlling construction-related fugitive dust.

Other Criteria Pollutants. Regional concentrations of CO in the Bay Area have not exceeded the state standards in the past 11 years and SO₂ concentrations have never exceeded the standards. The primary source of CO emissions from development projects is vehicle traffic. Construction-related SO₂ emissions represent a negligible portion of the total basin-wide emissions and construction-related CO emissions represent less than five percent of the Bay Area total basin-wide CO emissions. As discussed previously, the Bay Area is in attainment for both CO and SO₂. Furthermore, the BAAQMD has demonstrated, based on modeling, that in order to exceed the California ambient air quality standard of 9.0 ppm (8-hour average) or 20.0 ppm (1-hour average) for CO, project traffic in addition to existing traffic would need to exceed 44,000 vehicles per hour at affected intersections (or 24,000 vehicles per hour where vertical and/or horizontal mixing is

⁶³ PM₁₀ is often termed “coarse” particulate matter and is made of particulates that are 10 microns in diameter or smaller. PM_{2.5}, termed “fine” particulate matter, is composed of particles that are 2.5 microns or less in diameter.

⁶⁴ BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 16.

⁶⁵ Western Regional Air Partnership. 2006. *WRAP Fugitive Dust Handbook*. September 7, 2006. This document is available online at http://www.wrapair.org/forums/dejff/fdh/content/FDHandbook_Rev_06.pdf, accessed February 16, 2012.

⁶⁶ BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 27.

⁶⁷ BAAQMD, *CEQA Air Quality Guidelines*, May 2011.

⁶⁸ SFIA, *Construction Contract Specifications*, August 2015.

limited). Therefore, given the Bay Area's attainment status and the limited CO and SO₂ emissions that could result from a development projects, development projects would not result in a cumulatively considerable net increase in CO or SO₂, and quantitative analysis is not required.

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 are capable of causing chronic (i.e., of long-duration) and acute (i.e., severe but short-term) adverse effects to human health, including carcinogenic effects. Human health effects of TACs include birth defects, neurological damage, cancer, and mortality. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

Unlike criteria air pollutants, TACs do not have ambient air quality standards but are regulated by the BAAQMD using a risk-based approach to determine which sources and pollutants to control and to what degree. A health risk assessment is an analysis in which human health exposure to toxic substances is estimated, and considered together with information regarding the toxic potency of the substances, to provide quantitative estimates of health risks.⁶⁹

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 or, as in the case of residential receptors, their exposure time is greater than that for other land uses. Therefore, these groups are referred to as sensitive receptors. Exposure assessment guidance typically assumes that residences would be exposed to air pollution 24 hours per day, 350 days per year, for 70 years. Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

Exposures to fine particulate matter (PM_{2.5}) are strongly associated with mortality, respiratory diseases, and lung development in children, and other endpoints such as hospitalization for cardiopulmonary disease.⁷⁰ In addition to PM_{2.5}, diesel particulate matter (DPM) is also of concern. The California Air Resources Board (ARB) identified DPM as a TAC in 1998, primarily

⁶⁹ In general, a health risk assessment is required if the BAAQMD 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.

⁷⁰ SFDPH, *Assessment and Mitigation of Air Pollutant Health Effects from Intra-Urban Roadways: Guidance for Land Use Planning and Environmental Review*, May 2008.

based on evidence demonstrating cancer effects in humans.⁷¹ 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.

The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. For assessing community risks and hazards, the BAAQMD recommends that any proposed project that includes the siting of a new source or receptor assess associated impacts within a 1,000 foot radius around the project property boundary to determine whether operation-related TAC and PM_{2.5} emissions generated as part of the proposed project would expose receptors to levels that exceed the following thresholds of significance:⁷²

- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) risk greater than 1.0 hazard index from a single source; or
- An incremental increase of greater than 0.3 micrograms per cubic meter annual average PM_{2.5}

Construction Air Quality Impacts

Project-related air quality impacts fall into two categories: short-term impacts from construction and long-term impacts from project operation. The following addresses construction-related air quality impacts resulting from the proposed project.

Impact AQ-1: The proposed project's construction activities would generate fugitive dust and criteria air pollutants, but would not violate an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. (Less than Significant)

Construction activities (short-term) typically result in emissions of ozone precursors and PM in the form of dust (fugitive dust) and exhaust (e.g., vehicle tailpipe emissions). Emissions of ozone precursors and PM are primarily a result of the combustion of fuel from on-road and off-road vehicles. However, ROG are also emitted from activities that involve painting, other types of architectural coatings, or asphalt paving. The proposed project includes the demolition of the existing pre-security pedestrian connector and construction of the 6-story connector/office building. During the project's approximately 24-month construction period, construction activities would have the potential to result in emissions of ozone precursors and PM, as discussed below.

⁷¹ California Air Resources Board (ARB), Fact Sheet, "The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines," October 1998.

⁷² BAAQMD, CEQA Guidelines, May 2011.

Fugitive Dust

Project-related demolition, excavation, grading, and other construction activities may cause wind-blown dust that could contribute particulate matter into the local atmosphere. Although there are federal standards for air pollutants and implementation of state and regional air quality control plans, air pollutants continue to have impacts on human health throughout the country. California has found that particulate matter exposure can cause health effects at lower levels than national standards. The current health burden of particulate matter demands that, where possible, public agencies take feasible available actions to reduce sources of particulate matter exposure. According to the ARB, reducing particulate matter PM_{2.5} concentrations to state and federal standards of 12 µg/m³ in the San Francisco Bay Area would prevent between 200 and 1,300 premature deaths.⁷³

Dust can be an irritant causing watering eyes or irritation to the lungs, nose, and throat. Demolition, excavation, grading, and other construction activities can cause wind-blown dust that adds particulate matter to the local atmosphere. Depending on exposure, adverse health effects can occur due to this particulate matter in general and also due to specific contaminants such as lead or asbestos that may be constituents of soil.

The SFO standard construction contract specifications require all construction contractors to implement the BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.⁷⁴ Therefore, these measures (hereinafter referred to as best management practices or BMPs) would be required for construction of the proposed project. These BMPs include the following: (1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day; (2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered; (3) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. (4) All vehicle speeds on unpaved roads shall be limited to 15 mph. (5) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. (6) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points; (7) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator; (8) Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take

⁷³ ARB, *Methodology for Estimating Premature Deaths Associated with Long-term Exposure to Fine Airborne Particulate Matter in California*, Staff Report, Table 4c, October 24, 2008.

⁷⁴ BAAQMD, *CEQA Air Quality Guidelines*, May 2011.

corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance.

Compliance with the BAAQMD Basic Construction BMPs required by the SFO construction contract specifications would ensure that potential dust-related air quality impacts would be less than significant.

Criteria Air Pollutants

As discussed above, construction activities would result in emissions of criteria air pollutants from the use of off- and on-road vehicles and equipment. To assist lead agencies in determining whether short-term construction-related air pollutant emissions require further analysis as to whether the project may exceed the criteria air pollutant significance thresholds shown in Table 4, above, the BAAQMD, in its *CEQA Air Quality Guidelines* (May 2011), developed screening criteria. If a proposed project meets the screening criteria, then construction of the project would result in less-than-significant criteria air pollutant impacts. A project that exceeds the screening criteria may require a detailed air quality assessment to determine whether criteria air pollutant emissions would exceed significance thresholds. The *CEQA Air Quality Guidelines* note that the screening levels are generally representative of new development on greenfield⁷⁵ sites without any form of mitigation measures taken into consideration. In addition, the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions.

The proposed project exceeds the operational criteria air pollutant screening criteria,⁷⁶ therefore a quantitative analysis was conducted. Construction-related criteria air pollutants generated by the proposed project were quantified using the California Emissions Estimator Model (CalEEMod) and provided within an Air Quality Impact Analysis Technical Memorandum.⁷⁷ The model was developed, including default data (e.g., emission factors, meteorology, etc.), in collaboration with California air districts' staff. Default assumptions were used where project-specific information was unknown. Construction of the proposed project would occur over approximately two years. Emissions were converted from tons/year to pounds/day using the estimated construction duration of 540 working days. As shown in **Table 6**, project construction emissions would be below all significance thresholds.

⁷⁵ A greenfield site refers to agricultural or forest land or an undeveloped site earmarked for commercial, residential, or industrial projects.

⁷⁶ The project exceeds the operational criteria pollutant screening size of 61,000 sf and the operational GHG screening size for a government office building; the project is below the construction criteria pollutant screening size of 277,000 sf.

⁷⁷ San Francisco Planning Department, *SFO Courtyard 3 Connector Project – Air Quality Impact Analysis Technical Memorandum*, October 11, 2016.

Table 6: Daily Project Construction Emissions

	<u>Pollutant Emissions (Average Pounds per Day)</u>			
	ROG	NOx	Exhaust PM₁₀	Exhaust PM_{2.5}
Unmitigated Project Emissions	5.11	21.22	1.26	1.25
Significance Threshold	54.0	54.0	82.0	54.0

Emissions over threshold levels are in bold.

Source: BAAQMD, 2011; San Francisco Planning Department, 2016.

Therefore, the proposed project's construction emissions of fugitive dust and criteria air pollutants would not violate an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. This impact would be less than significant.

Impact AQ-2: The proposed project's construction activities would generate toxic air contaminants, including diesel particulate matter, but would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant)

With regards to construction emissions, off-road equipment (which includes construction-related equipment) is a large contributor to DPM emissions in California, although since 2007, the ARB has found the emissions to be substantially lower than previously expected.⁷⁸ Newer and more refined emission inventories have substantially lowered the estimates of DPM emissions from off-road equipment such that off-road equipment is now considered the sixth largest source of DPM emissions in California.⁷⁹ This reduction in emissions is due, in part, to effects of the economic recession and refined emissions estimation methodologies. For example, revised PM emission estimates for the year 2010, which DPM is a major component of total PM, have decreased by 83 percent from previous 2010 emission estimates for the SFBAAB.⁸⁰ Approximately half of the reduction can be attributed to the economic recession and approximately half can be attributed to updated assumptions independent of the economic recession (e.g., updated methodologies used to better assess construction emissions).⁸¹

⁷⁸ ARB, *Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements*, p.1 and p. 13 (Figure 4), October 2010.

⁷⁹ ARB, *Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements*, October 2010.

⁸⁰ ARB, "In-Use Off-Road Equipment, 2011 Inventory Model," Query accessed online, April 2, 2012, http://www.arb.ca.gov/msei/categories.htm#inuse_or_category.

⁸¹ ARB, *Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements*, October 2010.

Additionally, a number of federal and state regulations are requiring cleaner off-road equipment. Specifically, both the USEPA and California have set emissions standards for new off-road equipment engines, ranging from Tier 1 to Tier 4. Tier 1 emission standards were phased in between 1996 and 2000 and Tier 4 Interim and Final emission standards for all new engines would be phased in between 2008 and 2015. To meet the Tier 4 emission standards, engine manufacturers will be required to produce new engines with advanced emission-control technologies. Although the full benefits of these regulations will not be realized for several years, the USEPA estimates that by implementing the federal Tier 4 standards, NO_x and PM emissions will be reduced by more than 90 percent.⁸²

As discussed above, construction activities would result in emissions of TACs from the use of off- and on-road vehicles and equipment. The BAAQMD's *CEQA Air Quality Guidelines* (May 2011) assists lead agencies in determining whether short-term construction-related TAC emissions require further analysis as to whether the project may exceed the health risk thresholds. According to this guidance, the zone of influence for sensitive receptors is a 1,000-foot radius from the project site. Project sites that are further than 1,000 feet from a sensitive receptor would result in less-than-significant health risks associated with TACs and PM_{2.5}, and thus would not need to perform a detailed health risk assessment.⁸³ Additional guidance is provided in the *BAAQMD Screening Tables for Air Toxics Evaluation During Construction*.⁸⁴ These screening tables list the minimum distance required between the fence line of a construction site and a nearby sensitive receptor to ensure that cancer and non-cancer risks associated with the project are less than significant, per the BAAQMD's significance thresholds. According to the construction health risk screening table, a commercial project of 100,000 square feet (about the size of the proposed project) would require a minimum offset of 150 meters (approximately 500 feet) to ensure that a sensitive receptor would have a less-than-significant impact.

Although on-road heavy-duty diesel vehicles and off-road equipment would be used during the 24-month construction duration, emissions would be temporary and variable in nature and would not be expected to expose sensitive receptors to substantial air pollutants. As discussed in Section E.6, Noise, the nearest sensitive receptors are located approximately 3,800 feet southwest from the project site, well beyond the minimum offset distance screening criteria of 500 feet. Therefore, because the project site is not located in proximity to any sensitive receptors, TAC emissions would be less than significant.

⁸² United State Environmental Protection Agency (USEPA), "Clean Air Nonroad Diesel Rule: Fact Sheet," May 2004.

⁸³ *Ibid*, p. 5-2.

⁸⁴ BAAQMD, *Screening Tables for Air Toxics Evaluation During Construction*, May 2010.

Operational Air Quality Impacts

Land use projects typically result in emissions of criteria air pollutants and toxic air contaminants primarily from an increase in motor vehicle trips. However, land use projects may also result in criteria air pollutants and toxic air contaminants from combustion of natural gas, landscape maintenance, use of consumer products, and architectural coating. The following addresses air quality impacts resulting from operation of the proposed project.

Impact AQ-3: During project operations, the proposed project would result in emissions of criteria air pollutants, but not at levels that would violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. (Less than Significant)

As discussed above in Impact AQ-1, the BAAQMD, in its *CEQA Air Quality Guidelines* (May 2011), has developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If all the screening criteria are met by a proposed project, then the lead agency or applicant does not need to perform a detailed air quality assessment.

The proposed project would generate criteria pollutant emissions associated with vehicle traffic (mobile sources), on-site area sources (i.e., natural gas combustion for space and water heating, and combustion of other fuels by building and grounds maintenance equipment), and energy usage. Operational-related criteria air pollutants generated by the proposed project were quantified using CalEEMod and provided within an Air Quality Impact Analysis Technical Memorandum. Default assumptions were used where project-specific information was unknown.

The daily and annual emissions associated with operation of the proposed project are shown in **Table 7**. Table 7 also includes the City's thresholds of significance.

Table 7: Summary of Operational Criteria Air Pollutant Emissions

	ROG	NOx	PM₁₀	PM_{2.5}
Project Average Daily Emissions (lbs/day)	3.23	1.15	0.06	0.06
Significance Threshold (lbs/day)	54	54	82	54
Project Maximum Annual Emissions (tpy)	0.59	0.21	0.01	0.01
Significance Threshold (tpy)	10.0	10.0	15.0	10.0

lbs/day = pounds per day

tpy = tons per year

Source: BAAQMD, 2011; San Francisco Planning Department, 2016.

As shown in Table 7, the proposed project would not exceed any of the significance thresholds for criteria air pollutants, and would result in a less-than-significant impact with respect to criteria air pollutants.

Impact AQ-4: During project operations, the proposed project would generate toxic air contaminants, including diesel particulate matter, but would not expose sensitive receptors to substantial air pollutant concentrations. (Less than Significant)

As discussed above, the nearest sensitive receptors are approximately 3,800 feet from the project site, which is greater than the BAAQMD screening criteria of 1,000 feet. The proposed project would generate toxic air contaminants primarily as a result of an increase in vehicle trips. The BAAQMD considers roads with less than 10,000 vehicles per day “minor, low-impact” sources that do not pose a significant health impact even in combination with other nearby sources and recommends that these sources be excluded from the environmental analysis. The proposed project’s 120-150 net new vehicle trips would be well below this level and would be distributed among the local roadway network, therefore an assessment of project-generated TACs resulting from vehicle trips is not required, and the proposed project would not generate a substantial amount of TAC emissions that could affect nearby sensitive receptors. Therefore, this impact would be less than significant.

Impact AQ-5: The proposed project would not conflict with, or obstruct implementation of, the 2010 Clean Air Plan. (Less than Significant)

The most recently adopted air quality plan for the SFBAAB is the *2010 Clean Air Plan*, which demonstrates how the San Francisco Bay Area will achieve compliance with the state ozone standards as expeditiously as practicable and how the region will reduce the transport of ozone and ozone precursors to neighboring air basins. In determining consistency with the *2010 Clean Air Plan* (CAP), this analysis considers whether the project would: (1) support the primary goals of the CAP, (2) include applicable control measures from the CAP, and (3) avoid disrupting or hindering implementation of control measures identified in the CAP.

The primary goals of the CAP are to: (1) reduce emissions and decrease concentrations of harmful pollutants, (2) safeguard the public health by reducing exposure to air pollutants that pose the greatest health risk, and (3) reduce greenhouse gas (GHG) emissions. To meet the primary goals, the CAP recommends 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. The CAP recognizes that to a great extent, community design dictates individual travel mode, and that a key long-term control strategy to reduce emissions of criteria pollutants, air toxics, and greenhouse gases from motor vehicles is to channel future Bay Area growth into vibrant urban communities where goods and services are close at hand, and people have a range of viable transportation options. To this end, the *2010 Clean Air Plan* includes 55 control measures aimed at reducing air pollution in the SFBAAB.

The measures most applicable to the proposed project are transportation control measures and energy and climate control measures. The proposed project’s impact with respect to GHGs are

discussed in Section E.6, Greenhouse Gas Emissions, which demonstrates that the proposed project's greenhouse gas emissions would be less than significant.

SFO's Transit First policies and the availability of viable transportation options ensure that employees could ride transit, to and from the project site instead of taking trips via private automobile. These features ensure that the project would avoid substantial growth in automobile trips and vehicle miles traveled. The proposed project's anticipated 120-150 net new one-way vehicle trips would result in a negligible increase in air pollutant emissions. Furthermore, the proposed project would be generally consistent with the *San Francisco General Plan*, as discussed in Section C. Transportation control measures that are identified in the *2010 Clean Air Plan* are implemented by the *San Francisco General Plan* and the Planning Code, for example, through the City's Transit First Policy, bicycle parking requirements, and the SFO Sustainability Program. Compliance with these requirements would ensure the project includes relevant transportation control measures specified in the *2010 Clean Air Plan*. Therefore, the proposed project would include applicable control measures identified in the CAP to meet the CAP's primary goals.

Examples of a project that could cause the disruption or delay of *Clean Air Plan* control measures are projects that would preclude the extension of a transit line or bike path, or projects that propose excessive parking beyond parking requirements. The proposed project would provide an office building within the SFO terminal complex, near regional and local transit service, and does not provide new parking facilities. It would not preclude the extension of a transit line or a bike path or any other transit improvement, and thus would not disrupt or hinder implementation of control measures identified in the CAP.

For the reasons described above, the proposed project would not interfere with implementation of the *2010 Clean Air Plan*, and because the proposed project would be consistent with the applicable air quality plan that demonstrates how the region will improve ambient air quality and achieve the state and federal ambient air quality standards, this impact would be less than significant.

Impact AQ-6: The proposed project would not create objectionable odors that would affect a substantial number of people. (Less than Significant)

Typical odor sources of concern include wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing facilities, fiberglass manufacturing facilities, auto body shops, rendering plants, and coffee roasting facilities. During construction, diesel exhaust from construction equipment would generate some odors. However, construction-related odors would be temporary and would not persist upon project completion. Additionally, the proposed connector and office structure would not include significant sources of new odors. Therefore, odor impacts would be less than significant.

Cumulative Air Quality Impacts

Impact C-AQ-1: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area would result in less-than-significant cumulative air quality impacts. (Less than Significant)

As discussed above, regional air pollution is by its very nature largely a cumulative impact. Emissions from past, present and future projects contribute to the region's adverse air quality on a cumulative basis. No single project by itself would be sufficient in size to result in regional nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulative adverse air quality impacts.⁸⁵ The project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants. Therefore, because the proposed project's construction (Impact AQ-1) and operational (Impact AQ-3) emissions would not exceed the project-level thresholds for criteria air pollutants, the proposed project would not be considered to result in a cumulatively considerable contribution to regional air quality impacts.

Although the project would add new sources of TACs from a modest number of new vehicle trips, the project's incremental increase in localized TAC emissions resulting from 120 – 150 daily vehicle trips would be minor and would not contribute substantially to cumulative TAC emissions that could affect sensitive land uses in the vicinity which are located 3,800 feet southwest of the project site. Therefore, cumulative air quality impacts would be considered less than significant.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
8. GREENHOUSE GAS EMISSIONS— Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

⁸⁵ BAAQMD, *CEQA Air Quality Guidelines*, May 2011, page 2-1.

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.

The Bay Area Air Quality Management District (BAAQMD) has prepared guidelines and methodologies for analyzing GHGs. 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. CEQA Guidelines Section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. CEQA Guidelines Section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHGs and describes the required contents of such a plan. Accordingly, San Francisco has prepared *Strategies to Address Greenhouse Gas Emissions*⁸⁶ which presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's qualified GHG reduction strategy in compliance with the CEQA guidelines. These GHG reduction actions have resulted in a 23.3 percent reduction in GHG emissions in 2012 compared to 1990 levels,⁸⁷ exceeding the year 2020 reduction goals outlined in the BAAQMD's *Bay Area 2010 Clean Air Plan*, Executive Order (EO) S-3- 05, and Assembly Bill (AB) 32 (also known as the Global Warming Solutions Act).⁸⁸

SFO has supported the City's climate change initiatives⁸⁹ and developed a comprehensive GHG emissions reduction program. The *SFO 2015 Climate Action Plan*⁹⁰ states that, in FY 2015, SFO exceeded the City's 2017 GHG emissions target by achieving a 38 percent reduction from 1990 levels. Further, SFO has adopted a series of "Big Hairy Audacious Goals" for sustainability by 2021.⁹¹ These goals, outlined in the *SFO Strategic Plan 2017-2021*,⁹² include achieving carbon

⁸⁶ San Francisco Planning Department, *Strategies to Address Greenhouse Gas Emissions in San Francisco*, 2010. This document is available online at: <http://www.sf-planning.org/index.aspx?page=2627>.

⁸⁷ ICF International, *Technical Review of the 2012 Community-wide GHG Inventory for the City and County of San Francisco*, January 21, 2015. Available at http://sfenvironment.org/sites/default/files/fliers/files/icf_verificationmemo_2012sfecommunityinventory_2015-01-21.pdf, accessed March 16, 2015.

⁸⁸ Executive Order S-3-05, Assembly Bill 32, and the *Bay Area 2010 Clean Air Plan* set a target of reducing GHG emissions to below 1990 levels by year 2020.

⁸⁹ Ordinance No. 81-08, Climate Change Goals and Action Plan, mandates each City department achieve the following GHG emission targets below the 1990 emissions levels: 25% below by 2017; 40% below by 2025, and 80% below by 2050.

⁹⁰ SFIA, *2015 Climate Action Plan*, May 2016. Available at <http://media.flysfo.com/media/sfo/community-environment/2015-sfo-climate-action-plan.pdf>, accessed August 30, 2016.

⁹¹ Ibid.

neutrality and reducing GHG emissions by 50 percent from 1990 levels. The *SFO 2015 Climate Action Plan* includes a carbon footprint for three categories of sources: Scope 1 – Direct SFO-Controlled Emissions, GHG emissions from operations or activities that are under the control of SFO, including SFO fleet vehicles, on-site heating and cooling infrastructure, solid waste handling and disposal, fugitive refrigerant gas emissions, and wastewater treatment plant emissions; Scope 2 – Indirect Emissions from Electric Generation, GHG emissions attributed to offsite sources of electricity, purchased and consumed by SFO; and, Scope 3 – Other Indirect Emissions, those generated as a consequence of a company’s activities from sources not owned or operated by the company. At SFO these emissions include employee commute and passenger travel on public roads or by public transit, aircraft takeoff and landing, delivery trucks, ground services support equipment, and rental car fleet operations. The focus of the SFO Climate Action Plan is on the assessment and reduction of Scope 1 and 2 emissions, and reduction measures for Scope 3 emissions are encouraged in cooperation with the various stakeholders as part of SFO’s Environmental Sustainability Program.

Given that the City has met the State and region’s 2020 GHG reduction targets and San Francisco’s GHG reduction goals are consistent with, or more aggressive than, the long-term goals established under EO S-3-05,⁹³ EO B-30-15,^{94,95} and Senate Bill (SB) 32,^{96,97} the City’s GHG reduction goals are consistent with EO S-3-05, EO B-30-15, AB 32, SB 32, and the *Bay Area 2010 Clean Air Plan*. Therefore, proposed projects that are consistent with the City’s GHG reduction

⁹² SFIA, *SFO Five-Year Strategic Plan, 2017-2021*. Available at:

<http://media.flysfo.com.s3.amazonaws.com/assets/pdfs/reports/Strategic-Plan-2017-2021.pdf>, accessed August 30, 2016.

⁹³ Office of the Governor, Executive Order S-3-05, June 1, 2005. Available at

<http://www.pcl.org/projects/2008symposium/proceedings/Coatsworth12.pdf>, accessed March 16, 2016. Executive Order S-3-05 sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels (approximately 457 million metric tons of carbon dioxide equivalents (MTCO₂E)); by 2020, reduce emissions to 1990 levels (approximately 427 million MTCO₂E); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million MTCO₂E). Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in “carbon dioxide-equivalents,” which present a weighted average based on each gas’s heat absorption (or “global warming”) potential.

⁹⁴ Office of the Governor, *Executive Order B-30-15*, April 29, 2015. Available at

<https://www.gov.ca.gov/news.php?id=18938>, accessed March 3, 2016. Executive Order B-30-15, issued on April 29, 2015, sets forth a target of reducing GHG emissions to 40 percent below 1990 levels by 2030 (estimated at 2.9 million MTCO₂E).

⁹⁵ San Francisco’s GHG reduction goals are codified in Section 902 of the Environment Code and include: (i) by 2008, determine City GHG emissions for year 1990; (ii) by 2017, reduce GHG emissions by 25 percent below 1990 levels; (iii) by 2025, reduce GHG emissions by 40 percent below 1990 levels; and by 2050, reduce GHG emissions by 80 percent below 1990 levels.

⁹⁶ 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 greenhouse gas emissions to be reduced by 40 percent below 1990 levels by 2030.

⁹⁷ Senate Bill 32 was paired with Assembly Bill 197, which would modify the structure of the State Air Resources Board; institute requirements for the disclosure of greenhouse gas emissions criteria pollutants, and toxic air contaminants; and establish requirements for the review and adoption of rules, regulations, and measures for the reduction of greenhouse gas emissions.

strategy would be consistent with the aforementioned GHG reduction goals, would not conflict with these plans or result in significant GHG emissions, and would therefore not exceed San Francisco's applicable GHG threshold of significance.

The following analysis of the proposed project's impact on climate change focuses on the project's contribution to cumulatively significant GHG emissions. Because no individual project could emit GHGs at a level that could result in a significant impact on the global climate, this analysis is in a cumulative context, and this section does not include an individual project-specific impact statement.

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)

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction and operational phases. Direct operational GHG emissions include area sources (e.g., landscaping equipment, use of consumer products, etc.), energy sources (e.g., fuel combustion), and mobile sources (new vehicle trips). Indirect emissions include emissions from electricity providers; energy required to pump, treat, and convey water; and emissions associated with waste removal, disposal, and landfill operations.

The proposed project would increase the intensity of use of the site by construction of a new building for security checkpoint and office uses, which would allow for the development of additional airline offices and club lounges in other terminals. Therefore, the proposed project would contribute to annual long-term increases in GHGs as a result of increased vehicle trips from new employees (mobile sources) and commercial operations that result in an increase in energy use, water use, wastewater treatment, and solid waste disposal. Construction activities would also result in temporary increases in GHG emissions, from fuel combustion in construction equipment, construction worker vehicles, and haul truck trips. As shown in **Table 8**, the proposed project would not exceed the BAAQMD's significance threshold for GHG emissions during operation and there is no established criteria for construction.

**Table 8
Greenhouse Gas Emissions**

Source	Construction (metric tons per year CO₂e)	Operation (metric tons per year CO₂e)	Construction Annualized over 30- year Project Lifetime plus Operation (metric tons per year CO₂e)
Project Emissions	24.25	363.35	387.60
Greenhouse Gas Emissions Significance Threshold	Not established	1,100	Not established

Source: BAAQMD, 2011; San Francisco Planning Department, 2016.

Further, the proposed project would be subject to regulations adopted to reduce GHG emissions as identified in the GHG reduction strategy. As discussed below, compliance with the applicable regulations would reduce the project's GHG emissions related to transportation, energy use, waste disposal, and use of refrigerants.

Compliance with the City's Commuter Benefits Program, Emergency Ride Home Program, Healthy Air and Clean Transportation Ordinance, Bicycle Parking, Tenant Bicycle Parking and the SFO Transit First programs would reduce the proposed project's transportation-related emissions. These regulations and programs reduce GHG emissions from single-occupancy vehicles by promoting the use of alternative transportation modes with zero or lower GHG emissions on a per capita basis.

The proposed project would be required to comply with the energy and water efficiency requirements of the Green Building Requirements for City Buildings, the Commercial Water Conservation Ordinance, and the Stormwater Management Ordinance, which would promote energy and water efficiency, thereby reducing the proposed project's energy-related GHG emissions.⁹⁸ Additionally, the project would meet the renewable energy criteria of the LEED Gold Standards, further reducing the project's energy-related GHG emissions.

The proposed project's waste-related emissions would be reduced through compliance with the Green Building Requirements for City Buildings, the Resource Conservation Ordinance, Construction Recycled Content Ordinance, and Airport construction contract requirements for development of a construction and demolition debris management plan. In addition, the Airport is currently developing a Zero Waste Plan, which is anticipated to be completed in 2017 prior to the construction of the proposed project.⁹⁹ These regulations reduce the amount of materials sent to a landfill, reducing GHGs emitted by landfill operations. These regulations also promote reuse

⁹⁸ Compliance with water conservation measures reduce the energy (and GHG emissions) required to convey, pump and treat water required for the project.

⁹⁹ San Francisco Planning Department, Compliance Checklist Table for Greenhouse Gas Analysis: Table 2: Municipal Projects, SFO Courtyard 3 Connector Project, November 1, 2016.

of materials, conserving their embodied energy¹⁰⁰ and reducing the energy required to produce new materials.

Compliance with the Green Building Requirements for City Buildings also would reduce emissions of GHGs through limitations on refrigerant emissions and requirements for the use of materials such as paints, sealers, and finishes that have low emissions of volatile organic compounds (VOCs).¹⁰¹ The project would also comply with the Tropical Hardwood and Virgin Redwood Ban that prohibits City departments from procuring listed wood supplies. Thus, the proposed project was determined to be consistent with San Francisco's GHG reduction strategy.¹⁰²

The project sponsor is required to comply with these regulations, which have proven effective as San Francisco's GHG emissions have measurably decreased when compared to 1990 emissions levels, demonstrating that the City has met and exceeded EO S-3-05, AB 32, and the *Bay Area 2010 Clean Air Plan* GHG reduction goals for the year 2020. Other existing regulations, such as those implemented through AB 32, will continue to reduce a proposed project's contribution to climate change. In addition, San Francisco's local GHG reduction targets are consistent with the long-term GHG reduction goals of EO S-3-05, EO B-30-15, AB 32, SB 32, and the *Bay Area 2010 Clean Air Plan*. Therefore, because the proposed projects is consistent with the City's GHG reduction strategy, it is also consistent with the GHG reduction goals of EO S-3-05, EO B-30-15, AB 32, SB 32 and the *Bay Area 2010 Clean Air Plan*, would not conflict with these plans, and would therefore not exceed San Francisco's applicable GHG threshold of significance. As discussed above, SFO has a comprehensive GHG emissions reduction program which has exceeded San Francisco's local GHG reduction targets, achieving a 38 percent reduction from 1990 levels in 2015. The *SFO 2015 Climate Action Plan* and the *SFO Five-Year Strategic Plan* outline strategies to continue to reduce GHG emissions at the Airport, furthering the City's GHG reduction goals.

For these reasons, the proposed project would result in a less-than-significant impact with respect to GHG emissions. No mitigation measures are necessary.

¹⁰⁰ Embodied energy is the total energy required for the extraction, processing, manufacture and delivery of building materials to the building site.

¹⁰¹ While not a GHG, VOCs are precursor pollutants that form ground level ozone. Increased ground level ozone is an anticipated effect of future global warming that would result in added health effects locally. Reducing VOC emissions would reduce the anticipated local effects of global warming.

¹⁰² San Francisco Planning Department, *Greenhouse Gas Analysis: Compliance Checklist for SFO Connector Project*. November 16, 2016.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
9. WIND AND SHADOW—Would the project:					
a) Alter wind in a manner that substantially affects public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact WS-1: The proposed project would not alter wind in a manner that substantially affects public areas. (Less than Significant)

Tall buildings and structures can strongly affect the wind environment for pedestrians. Groups of structures tend to slow the winds near ground level, due to the friction and drag of the structures themselves on winds. Buildings that are much taller than their surrounding buildings intercept and redirect winds that might otherwise flow overhead, and bring them down the vertical face of the building to ground level, where they create ground-level wind and turbulence. These redirected winds can be relatively strong and also relatively turbulent, and can be incompatible with the intended uses of nearby ground-level spaces. In addition, building designs that present tall flat surfaces square to strong winds can create ground-level winds that can prove to be hazardous to pedestrians in the vicinity.

The Airport is in the BAAQMD Peninsula climatological subregion. The elevation of the peninsula is mostly below 200 feet, enabling the surrounding marine air from the San Francisco Bay to flow easily across the project area. Average annual wind speeds range from 7 to 14 miles per hour, predominantly from a west to west-northwest direction.¹⁰³ The proposed, approximately 122-foot-tall building could redirect some of these winds to the ground level.

The project site is bounded by the airfield to the east, the Airport loop road to the west, and the adjacent Terminal 2 and Terminal 3 buildings, which are approximately 55 feet tall. There are no public areas, such as parks, near the project site that would be affected by any potential changes in wind conditions. The Airport's outdoor public spaces in the Courtyard 3 project area comprise sidewalks for passenger loading, unloading, and queuing for ground transportation. Wind speeds in these outdoor areas are already generally reduced by the intervening garage building massing to the west, nearby terminal buildings, as well as by airport circulation viaducts for automobiles and the AirTrain. Thus, the proposed Courtyard 3 Connector project would not have a substantial effect on wind speeds in the public areas and the project would therefore have a less-than-significant wind impact.

¹⁰³ Windfinder, Wind Statistics, 2016. Available at https://www.windfinder.com/windstatistics/san_francisco, accessed August 30, 2016.

Impact WS-2: The proposed project would not create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas. (Less than Significant)

The proposed building would generate new shadows. Shadow would be cast westward in the early morning hours towards the Airport roadway and central parking garage and turn northward as the day progresses. In the afternoon and evening, shadows would lengthen and extend eastward toward the existing AOA. Some of the new shadow generated would be encompassed within the existing shadows cast by adjacent terminals and air traffic control tower. New shadow could be cast on roadways and passenger loading zones within the Airport, but this additional shadow would not affect the use or function of these areas.

The closest public open space to the project site is approximately 3,800 feet away at the Marina Vista Park, in the City of Millbrae, directly to the southwest across U.S. 101. Given the distance of the project site from the open space, shadow from the proposed building would not reach this recreational facility. The proposed project would have a less than significant shadow impact on recreational facilities and other public areas.

Impact C-WS: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would result in less than significant wind and shadow impacts. (Less than Significant)

Wind and shadow effects are highly localized. As stated above, the proposed project site is in an area removed from public parks and open spaces. Outdoor areas at SFO generally comprise passenger loading and unloading zones, and these areas are already relatively protected from wind effects, and are already shaded by existing buildings. The proposed project, in combination with past, present, and reasonably foreseeable project area development, would not result in significant cumulative wind and shadow impacts.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
10. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Physically degrade existing recreational resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is bounded by terminal buildings, internal Airport roadways, and the airfield and does not contain any recreation facilities or parks. There are three parks or recreational facilities within a one-mile radius of the project site; the closest are the City of Millbrae's Marina Vista Park and Bayside Manor Park, located across U.S. 101, approximately 0.75-miles southwest and south of the project site, respectively. Bayfront Park is located approximately one mile southeast of the project site along the edge of San Francisco Bay.

Impact RE-1: The proposed project would not include or require the construction/expansion of recreational facilities, increase the use of existing parks or other recreation facilities such that substantial physical deterioration of the facilities would occur, or physically degrade existing recreational resources. (No Impact)

The proposed project would not include construction of recreational facilities. Further, the proposed connector structure and offices would not include residential development that could require construction or expansion of recreational facilities in the vicinity. The project site is located at least 0.75-mile from the nearest neighborhood parks and open spaces, thus the project would not affect these existing recreational resources. The proposed project's future employees are not anticipated to increase the use of existing community recreational facilities in the area such that substantial physical deterioration of these facilities would occur or be accelerated. For these reasons, the proposed project would have no impact on recreational resources.

Impact C-RE: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would result in less than significant recreation impacts. (No Impact)

The project site does not contain any recreation facilities. As described above, construction and operation of the proposed project would not increase the use of existing recreation facilities or require the construction or expansion of any recreation facilities. Therefore, the proposed project would have no impact on any potential cumulative impact on recreation facilities.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
11. UTILITIES AND SERVICE SYSTEMS— Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supply available to serve the project from existing entitlements and resources, or require new or expanded water supply resources or entitlements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SFO operates a wastewater treatment plant on Airport property northeast of the project site, the Mel Leong Treatment Plant (MLTP), that serves all Airport systems and facilities. The MLTP is composed of two sub-plants: a sanitary plant and an industrial plant. The sanitary plant treats wastewater from potable uses such as terminal restrooms, hangars, restaurants, and concessions. The industrial plant treats first-flush stormwater collected throughout non-terminal areas of SFO and maintenance-related wastewater (i.e., car washes, maintenance shops, etc.). Each plant can treat or store excess flows from the other to ensure all flows to the MLTP are properly treated and to act as a redundant to one another when necessary. Treated effluent from the MLTP is pumped to the South San Francisco Wastewater Treatment Facility, along with discharge from South San Francisco, San Bruno, Millbrae, and Burlingame, for discharge through a deepwater outfall into San Francisco Bay. Solid waste from the MLTP is dried on-site and transported to an off-site location for disposal.

Impact UT-1: The proposed project would not exceed the wastewater treatment requirements of the Regional Water Quality Control Board. (Less than Significant)

The wastewater treatment requirements for the MLTP are set forth by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in the facility's National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038318. The permit establishes the operating

parameters and effluent limitations for the plant. The MLTP has a permitted capacity of 2.2 million gallons per day (mgd) for the sanitary plant and 1.2 mgd for the industrial plant.¹⁰⁴ The average flows for the two sub-plants are currently each approximately 0.65 mgd, with the industrial plant receiving approximately 1.0 mgd during the wet months.¹⁰⁵

The proposed project would introduce new operational uses that would result in increased discharge to MLTP's sanitary plant from proposed passenger facilities and administrative office uses. Discharges would be similar to the Airport wastewater currently treated at the MLTP and would not require any changes to treatment processes or result in exceedances of effluent limitations. As described above, the sanitary plant has adequate capacity for treatment of additional sanitary flows.

The project site is currently covered with impervious surfaces, an asphalt-paved parking lot and building structures. Stormwater runoff from the site flows through the SFO stormwater drainage system to the MLTP industrial plant for treatment. With the proposed new building, the project site would remain covered with impervious surfaces, hence, there would be no increase in stormwater flows. The MLTP industrial plant has adequate capacity to continue to treat stormwater flows.

For these reasons, the proposed project would not exceed the RWQCB wastewater treatment requirements and the impact would be less than significant.

Impact UT-2: The proposed project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (No Impact)

The San Francisco Public Utilities Commission (SFPUC) would provide water for the proposed project; no water treatment facilities are proposed or required. As described under Impact UT-1, the existing MLTP has adequate capacity to provide wastewater treatment for the proposed Courtyard 3 Connector project. Because the proposed project would not require or result in construction of new or expanded water or wastewater treatment facilities, it would have no impact.

Impact UT-3: The proposed project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

Currently, first-flush storm water runoff from the existing building and asphalt parking lot flows into SFO's drainage infrastructure, to the MLTP. The project would modify the existing on-site storm water drainage system to accommodate the proposed structure and provide lateral

¹⁰⁴ San Francisco Bay Regional Water Quality Control Board, Revised Tentative Order No. R2-2013-0011, NPDES Permit No.CA0038318 for SFIA Mel Leong Treatment Plants (Sanitary and Industrial Plants) and wastewater collection systems, May 8, 2013.

¹⁰⁵ SFO Engineering, T2/T3 Connector Project Data Request Log, April 29, 2016.

connections to the SFO storm water drainage infrastructure, but would not require construction of new or expanded storm water drainage facilities at the Airport. Therefore, this impact would be less than significant.

Impact UT-4: Sufficient water supply would be available to serve the proposed project from existing entitlements and resources, and no new or expanded water supply resources or entitlements would be required. (Less than Significant)

The proposed project would include a security checkpoint, connector bridge, and administrative offices that would increase water use at the project site. The project would include the installation of low-flush toilets and similar water conservation systems to minimize potential demand. The proposed project would not result in an increase of water use beyond that assumed for planning in the San SFPUC's 2015 *Urban Water Management Plan*. The Urban Water Management Plan considers SFO a "retail customer" and predicts water demand for the SFO service area will be met in the foreseeable future.¹⁰⁶ Water use demands for SFO would nominally increase because of the proposed development but would not exceed the Airport's resources allocated through the SFPUC. While new laterals would be needed to connect the site to existing water supply lines, the project site is in a developed airport area that has existing water utilities infrastructure. Combined with the Airport's ongoing water conservation efforts, the proposed project would result in a less-than-significant impact on water supplies.

Impact UT-5: The proposed project would not result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (No Impact)

As described under Impact UT-1 above, the project wastewater would discharge to the existing MLTP wastewater treatment plant which has adequate capacity to support the sanitary and industrial wastewater treatment requirements of the project. Therefore, the proposed project would not result in a determination from the MLTP that it has inadequate capacity to serve the project (no impact).

Impact UT-6: The proposed project would be adequately served by existing landfill capacity and would comply with federal, state, and local statutes and regulations related to solid waste. (Less than Significant)

The proposed project would comply with all federal, state, and local statutes and regulations related to solid waste. SFO's environmental service division oversees solid waste collection and recycling programs. Solid waste is collected and transported to a South San Francisco transfer station and material recovery facility by South San Francisco Scavenger Company, where it is separated to remove recyclable materials. Once processed to remove recyclable materials, the solid waste is transferred to the Ox Mountain Landfill, operated by Republic Services Company. In 2013, SFO generated about 10,586 tons of solid waste. SFO has increased its solid waste recycling from 51 percent in 2002 to nearly 80 percent in 2014, and continues to recycle almost all

¹⁰⁶ San Francisco Public Utilities Commission, *Urban Water Management Plan – 2015*, April 2016.

of the construction and demolition waste generated at the Airport, with a consistent recycling rate of over 90 percent.¹⁰⁷

The Ox Mountain landfill is the only active landfill in San Mateo County. Republic Services estimates that the landfill has enough landfill capacity to last another 20 years at the current rate of landfilling.¹⁰⁸ The Bay Area has 18 landfills, with a total remaining capacity of 218 million tons, estimated to be 44 years of landfilling at the current rate of disposal. Overall statewide, 1,728 million tons of existing landfill capacity are remaining. Estimates of the number of years of existing landfill space in California range from 27 years (large economic boom scenario) to 68 years (if state meet 75 percent recycling goal by 2020). At the current disposal rate per capita, 42 years of landfill capacity are estimated to be remaining statewide.¹⁰⁹ Based on these factors, the proposed project's demolition and construction debris and operational solid waste needs would be adequately served. SFO would continue to comply with solid waste statutes and regulations for its ongoing operations and for the proposed project. As a result, the project would have a less-than-significant impact related to solid waste.

Impact C-UT: The proposed project, in combination with other past, present, and reasonably foreseeable projects, would result in less than significant impacts on utilities and service systems. (Less than Significant)

The proposed project, along with other development in the project area, would incrementally increase demand on utilities and service systems, but not beyond levels anticipated and planned for by public service providers in existing service management plan areas. This increased demand would therefore result in less-than-significant cumulative impacts on existing utilities and service systems. The proposed project would result in an increase in demand on utilities and service systems used by the proposed airport and office uses. However, the MLTP has the capacity to serve the utility requirements of the cumulative Airport developments. The MLTP does not provide services to off-airport locations, such as adjacent and nearby cities. Therefore, the proposed project would not contribute to additional demand on the utilities and service systems of adjacent cities. With respect to solid waste, as discussed above, landfills in the Bay Area have capacity to meet Airport-wide solid waste demand along with regional landfill needs for at least the next forty years. According to the CalRecycle Facility Inventory Analysis, at the statewide level, there is currently ample disposal capacity available for solid waste and municipal solid waste landfills.¹¹⁰ Hence, the project would result in less than significant cumulative impacts on utilities and services for wastewater treatment and/or capacity, storm water drainage facilities, water supply, and/or waste disposal facilities.

¹⁰⁷ San Francisco Airport Commission, *2014 Environmental Sustainability Report*, p.29.

¹⁰⁸ South Bayside Waste Management Authority, *2015 Final Long Range Plan*, June 25, 2015.

¹⁰⁹ CalRecycle, *State of Disposal in California*, March 2015.

¹¹⁰ CalRecycle, Facility Information Toolbox (FacIT). Available at: <http://www.calrecycle.ca.gov/FacIT/QuickFacts.htm>. Accessed October 7, 2016.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
12. PUBLIC SERVICES— Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of, or the 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 public services such as fire protection, police protection, schools, parks, or other services?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact PS-1: The proposed project would not result in substantial adverse physical impacts from new or altered government facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any public services, such as fire protection, police protection, schools, or parks. (Less than Significant)

The San Francisco Fire Department (SFFD) Airport Division and the San Francisco Police Department (SFPD) Airport Bureau serve SFO with full on-site operations, including administration and training. SFFD Airfield Rescue and Fire Fighting (ARFF) station #3 is located about 0.5 miles south of the proposed project site on South McDonnell Road. ARFF #3 provides full crash/fire/rescue services for the southern portion of the airfield, the International Terminal, and Terminal 1. Emergency medical services are supplemented by San Mateo County and the Airport Medical Clinic, located in the International Terminal Building. The main SFPD Airport Bureau station is located on the arrivals level at Terminal 1; SFPD substations are also located at each of the terminals.

The proposed project would not increase the number of passengers or travel trips at the Airport and would only marginally increase the number of employees. No increased demand for police and fire services are anticipated, however, any additional demand could be adequately served by existing services provided in the project vicinity. The proposed project would not require new or expanded government facilities for public safety and fire protection facilities beyond those currently existing at the Airport. Therefore, the proposed project's effects on police protection, fire, and emergency services would be less than significant.

As described in Initial Study Checklist criteria E.3, Population and Housing, and E.10, Recreation, the proposed project would not cause an increase in operations or the number of passengers, and the increase in employees would be nominal. Employees are not expected to increase patronage or use of parks and recreational areas in the vicinity of the Airport. Furthermore, because the

project would not increase population within the area, schools in the surrounding vicinity would not be affected. Therefore, proposed project would have no impact impacts on parks and schools.

Impact C-PS: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would result in less than significant public services impacts. (Less than Significant)

Cumulative development in the project area, including the proposed project, would incrementally increase demand for public services, but not beyond levels anticipated and planned for by public service providers. The proposed project would not cause a substantial increase in operations, employees, or the number of passengers at the Airport, and therefore would not contribute considerably to any potential cumulative impacts on parks and schools in the vicinity. Hence, the proposed project would have less-than-significant cumulative impacts on public services.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
13. 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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Topics:	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

There are no adopted habitat conservation plans applicable to the project site; therefore, Initial Study Checklist criterion E.13(f) is not applicable to the proposed project.

Impact BI-1: The proposed project would not have a substantial adverse effect on special-status species, riparian habitat or sensitive natural communities, wetlands, native or migratory wildlife species, and would not conflict with any local policies or ordinances protecting biological resources. (Less than Significant)

The project site is an existing paved parking lot and building within the main terminal complex at SFO and does not support any vegetation, trees, riparian or sensitive natural communities. Due to the lack of suitable habitat, there is negligible potential for any special status species to be present. A California Natural Diversity Database search did not identify any occurrences of special status species within the project boundaries. The nearest habitats for special status species are approximately 2.5 miles west and north of the project site and include habitats for the San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*), California red-legged frog (*Rana draytonii*), and the Bay checkerspot butterfly (*Euphydryas editha bayensis*).^{111, 112}

The SFO runway and Bay shoreline areas 0.5-mile east of the site include habitats such as annual grasslands, seasonal wetlands and tidal mudflats that support a variety of bird species, rodents, and benthic invertebrates. San Francisco Bay and its shallow bay habitat is located approximately one mile from the site.¹¹³ Construction and operation of the proposed project would not affect these habitat areas, nor would it affect the fish and wildlife species that occupy these habitats. There is no tree protection policy applicable to the project site.

Wildlife within the proposed project area is limited due to lack of suitable habitat, and generally consists of avian species, possibly including migratory birds. Wildlife can be hazardous to airport and aircraft operations and the Airport is required by federal mandate¹¹⁴ to implement wildlife

¹¹¹ California Natural Diversity Database Quick Viewer:

<http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>, accessed August 29, 2013.

¹¹² US Fish and Wildlife Service, Critical Habitat Portal. Available at: <http://criticalhabitat.fws.gov/>, accessed August 31, 2016.

¹¹³ San Francisco Planning Department, *San Francisco International Airport Runway Safety Area Program Mitigated Negative Declaration*, Case No. 2010.0755E, July 20, 2011.

¹¹⁴ 14 Code of Federal Regulations Part 139.3387

management techniques, to reduce or eliminate the area's attractiveness to wildlife. The Airport implements a Wildlife Hazard Management Plan (WHMP) which identifies monitoring, control, and habitat management strategies to reduce decrease avian attractants at and near the Airport.¹¹⁵ Aircraft and motor vehicle operations would be deterrent to bird activity at the project site, due to its location between the airfield and the Airport roadway. The proposed building would be situated within the terminal complex surrounded by similar structures. The proposed building would be designed in general accordance with San Francisco's standards for bird-safe buildings, which incorporate features in window glazing, façade treatments, and lighting to reduce bird strikes on new buildings.¹¹⁶ As discussed in the WHMP Section 6.5, the Airport's Wildlife Biologist would review proposed plans in an effort to minimize or eliminate designs that may attract wildlife. For these reasons, the proposed project would not substantially interfere with the movement of migratory birds or otherwise substantially adversely affect wildlife species. Therefore, this impact would be less than significant.

Impact C-BI: The proposed project would not combine with past, present, or reasonably foreseeable future development to have a significant impact on special-status species, riparian habitat or sensitive natural communities, wetlands, native or migratory wildlife species, and would not conflict with any local policies or ordinances protecting biological resources. (Less than Significant)

As stated above, the proposed project would have no impact on special status species, riparian habitat, wetlands, or other sensitive natural communities and would not conflict with any local policies or ordinances protecting biological resources. Therefore, it would not contribute to any potential adverse effects on these biological resources associated with cumulative development in the vicinity.. Cumulative projects, as listed in Table 3, would occur within primarily within developed Airport and nearby urban areas, and would not substantially attract or interfere with migratory bird species. Accordingly, the proposed project in combination with other cumulative development, would not result in a significant cumulative effect on the movement of migratory bird or other wildlife species.

¹¹⁵ ICF Jones & Stokes and LSA Associates, *SFO Wildlife Hazard Management Plan*, April 12, 2016.

¹¹⁶ San Francisco Planning Department, *Standards for Bird-Safe Buildings*, adopted July 14, 2011.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
14. GEOLOGY AND SOILS— Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Change substantially the topography or any unique geologic or physical features of the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Regarding Initial Study Checklist criterion E.14(e), the proposed project does not include a septic system or alternative wastewater disposal system; therefore, impacts related to soils capable of supporting these systems are not applicable to the proposed project.

Impact GE-1: The proposed project would not expose people and structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (liquefaction or lateral spreading), and landslides. (Less than Significant)

Faulting: The Airport is not located within an Alquist-Priolo Earthquake Fault Zone.¹¹⁷ The nearest fault zoned active in accordance with the State Geologist's standards is the San Andreas Fault, located more than 2 miles southwest of the project site. Therefore, impacts related to ground fault rupture are less than significant.

Seismic Ground Shaking and Seismic Ground Failure: The project could be affected by strong ground shaking as a result of an earthquake on one of the regional faults. Mapping by the Association of Bay Area Governments indicates that the project site could experience very strong ground shaking in the event of an earthquake on the San Andreas Fault,¹¹⁸ the nearest fault to the project area.

According to the Environmental Impact Report for the SFO Master Plan,¹¹⁹ the project site is located within a zone of high ground failure potential identified by the California Division of Mines and Geology. The EIR reports that while up to four inches of seismically-induced ground settlement has occurred at the Airport, major liquefaction-induced ground failure has not been reported at the Airport during past earthquakes. However, mapping by the US Geological Survey indicates that the project site is in an area of very high liquefaction potential,¹²⁰ and the project area has not been subjected to the maximum expected ground shaking intensity or a long-duration earthquake since Airport construction began in 1927.

To address seismic ground shaking and ground failures, the new building would be supported on a pile foundation and built according to the stringent seismic requirements of the California Building Code, which would reduce the potential for damage in the event of an earthquake. SFO ensures compliance with the current CBC through the SFO BICE Section. BICE reviews and approves all tenant improvement proposals; issues Airport Building Permits; enforces compliance with applicable building codes and other construction standards and regulations; confirms conformance with approved contract documents; inspects construction activities at the Airport; and issues a certificate of occupancy once the building official finds no violations of the provisions of the TIG, California Building Code, or other applicable laws and codes. In

¹¹⁷ California Geological Survey (CGS), *Fault-Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zones Maps*, Special Publication 42, Interim Revision, 2007.

¹¹⁸ Association of Bay Area Governments (ABAG). 2012. *Earthquake Shaking Maps and Information*, <http://quake.abag.ca.gov/shaking/>. Accessed August 9, 2013.

¹¹⁹ CCSF Department of City Planning, *San Francisco International Airport Master Plan Final Environmental Impact Report* 86.638E, May 28, 1992.

¹²⁰ U.S. Geological Survey, *Maps of Quaternary Deposits and Liquefaction Susceptibility in the San Francisco Bay Region, California. Liquefaction Susceptibility*. Open-File Report 06-1037. 2006.

accordance with the TIG,¹²¹ a subsurface geotechnical investigation by a qualified geotechnical engineer would be required to confirm the geologic, hydrogeologic and geotechnical conditions at the project site and to provide foundation design requirements. The building design recommendations would address resistance to lateral forces, liquefaction, soil corrosivity, bearing capacity, soil expansion potential, and settlement. With compliance with the CBC and the provisions of the SFO TIG related to seismic design of the facility and earthquake safety, the proposed project's would not expose people or structures to substantial adverse effects from seismic events and this impact would be less than significant.

Earthquake-induced landslides: The project site and surrounding land are nearly level, and there are no mapped landslides in the project vicinity.¹²² Therefore there is no impact related to earthquake-induced landslides.

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

Erosion. Soil would temporarily be exposed to erosion during construction of the proposed project. However, as discussed in Section E.15, Hydrology and Water Quality, impacts related to erosion would be less than significant with implementation of erosion control measures in accordance with the site-specific Storm Water Pollution Prevention Plan (SWPPP) and construction site monitoring program in accordance with the Construction General Storm Water Permit, SFO's NPDES permit for the Mel Leong Treatment Plant, and the SFO SWPPP. The TIG and the 2016 SWPPP for Construction Activities specifically address additional requirements for control of construction-related storm water during construction activities at SFO. Because compliance with these requirements is enforced through CCSF Airport Commission Contract Specifications for SFO construction projects, the project would not result in substantial erosion and this impact would be less than significant.

Loss of Topsoil. The project site is covered with impervious surfaces and is part of the developed Airport terminal complex. Construction of existing facilities would have removed any topsoil (a fertile soil horizon that typically contains a seed base). Therefore, the project would have no impact related to the removal of topsoil.

Impact GE-3: The proposed project would not cause a geologic unit or soil to become unstable as a result of the project and result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant)

The shallow geologic units at the Airport consist of fill material underlain by Young Bay Mud. This unit is underlain by dense silty sands which are in turn underlain by older bay muds. These older bay muds are relatively stiff firm clays that contain varying amounts of silt and lenses of

¹²¹ San Francisco International Airport, *Tenant Improvement Guide*. April 1999.

¹²² US Geological Survey, *Summary Distribution of Slides and Earth Flows in San Mateo County, California*. Open File Report 97-745C. 1997.

sand and gravel and they are considered suitable for foundation design. Bedrock of the Franciscan Complex occurs at approximately 100 feet below ground surface. Groundwater is relatively shallow, generally less than five feet below ground surface.¹²³

Geologic or soil units can become unstable, or settle, for a variety of reasons. Immediate settlement occurs when a load from a structure or placement of new fill material is applied, causing distortion in the underlying materials. This settlement occurs quickly and is typically complete after placement of the final load. Consolidation settlement occurs in saturated clay from the volume change caused by squeezing out water from the pore spaces. Consolidation occurs over a period of time and is followed by secondary compression, a continued change in the pore spaces under the continued application of the load. Consolidation settlement is one of the characteristic hazards of Bay Mud deposits, as well as poorly engineered fill materials. Soils tend to settle at different rates and by varying amounts depending on the load weight or changes in properties over an area, referred to as differential settlement of the soils.

Construction: During construction of the building, the shallow geologic units could become unstable, or settle, as a result of soil excavation for trenching, construction-related groundwater dewatering, and pile driving. Such settlement could potentially damage adjacent facilities including Terminals 2 and 3, roadways, and utilities. During excavation, shoring could be required to prevent this soil from becoming unstable. While this could minimize the need for groundwater dewatering, installation of utilities and compaction of soil could still require some dewatering which could cause settlement. Driving of displacement piles may also cause the ground to heave up to several inches, and the heave could also adversely affect adjacent structures.

The potential for settlement during construction would be addressed through compliance with Section 604.5 of the TIG, which requires the project contractor to provide adequate supports to ensure the protection of existing structures and installations during excavation. The planned protection would be subject to approval of BICE as part of their review.

Operation: Once constructed, the proposed building could experience excessive settlement if it caused the soft and compressible Young Bay Mud to compress. However, as discussed in Impact GE-1, the new building would be supported on a pile foundation supported by underlying soils with sufficient competency to support the piles and built according to the stringent seismic requirements of the CBC, which would reduce the potential for damaging settlement. The specific foundation and geotechnical requirements for the project would be determined on the basis of a site-specific geotechnical investigation as required by the TIG. While some settlement of adjacent paving and utilities could occur, which could result in damage to utilities, the geotechnical report would include recommendations for avoiding this kind of damage, such as the use of flexible utility connections.

¹²³ SFIA Master Plan EIR, Ibid.

Compliance with the CBC would be ensured through the standard BICE procedures by reviewing and approving all building permit applications and confirming conformance with construction contract documents. Further, the Airport would be required to adhere to the recommendations of the site-specific geotechnical investigation incorporated into the project design. Compliance with the CBC and SFO regulations would ensure impacts related to potential unstable geologic units or soils would be less than significant.

Impact GE-4: The proposed project would not create substantial risks to life or property as a result of expansive soil. (Less than Significant)

The presence of expansive soils is not an issue because the artificial fill beneath the project area is sandy and would not be expansive, and because the Young Bay Mud beneath the project site is generally below the groundwater table, and thus permanently saturated. Further, Section 502.6 of the TIG requires that dry backfill materials used in construction excavations have an expansion index of 2 percent or less. Therefore, impacts related to expansive soils would be less than significant.

Impact GE-5: The proposed project would not result in impacts on unique geologic or physical features or alter the topography of the project area. (No Impact)

There are no unique geologic or physical features within the project area. The site is a mostly flat, paved parking lot and developed area and the proposed project would not change the site topography. Therefore, there is no impact related to changes to unique geologic or physical features or alteration of topography.

Impact GE-6: The proposed project would not directly or indirectly destroy a unique paleontological resource or site. (Less than Significant)

The proposed project would be constructed on strata comprised entirely of imported fill and Young Bay Mud, neither of which typically contains vertebrate paleontological remains. Because there is little likelihood of accidental discovery of paleontological resources during project construction, there would be a less-than-significant impact on unique paleontological resources with project implementation.

Impact C-GE: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would result in less than significant geology and soils impacts. (Less than Significant)

Geologic impacts resulting from the proposed project are limited to seismic effects and the potential for creation of an unstable geologic unit. Because these effects are generally localized, the geographic scope for the geologic impacts assessment includes the project area and immediate vicinity at SFO.

Seismic Safety. The proposed project and other SFO projects contribute to an increase in the number of persons potentially exposed to seismic risks at SFO, which could result in a potentially significant cumulative seismic safety impact. However, as discussed in Impact GE-1, the proposed project and other cumulative Airport projects would be constructed in accordance with the most current CBC requirements for seismic safety and the provisions of the TIG. These regulatory requirements provide for increased life-safety protection of visitors and workers. Therefore, the proposed project's contribution to any potential cumulative impacts related to seismic safety would not be cumulatively considerable (less than significant).

Unstable Geologic Units. As discussed in Impact GE-3, during construction, the proposed project could result in ground settlement from excavation, construction dewatering, and from heaving during pile installation. Once constructed, the building could also settle as a result of compressing the soft and compressible Young Bay Mud. However, the effects of ground settlement are relatively localized, and the only cumulative projects listed in Table 3 that could contribute to cumulative impacts related to an unstable geologic unit are other projects located on Airport property. The proposed project and these projects would be required to comply with Section 604.5 of the TIG to address settlement during construction and would also be constructed in accordance with the current California Building Code as discussed in Impact GE-3, which would prevent unacceptable settlement once constructed. With compliance with these requirements, cumulative impacts related to ground settlement would be less than significant.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
15. HYDROLOGY AND WATER QUALITY— Would the project:					
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project would not construct housing; therefore, criterion E.15(g) is not applicable.

Impact HY-1: The proposed project would not violate water quality standards or otherwise substantially degrade water quality. (Less than Significant)

The proposed project could result in a violation of water quality standards or degradation of water quality as a result of construction-related erosion and hazardous materials releases; discharges of groundwater during construction-related dewatering; and changes in long-term stormwater discharges once the proposed project is constructed.

Construction-related erosion and hazardous materials releases. During project construction, exposed soil from stockpiles and graded areas within the project area could be transported by wind or storm water. If not properly managed, erosion as a result of these activities could increase the sediment load (turbidity) in the storm water runoff and sediments could also accumulate in storm drains, potentially reducing the flood carrying capacity of the drains. In addition, construction activities would use hazardous materials such as fuels, adhesives, solvents, paints, and petroleum lubricants, which, if not managed appropriately, could become mobilized

by run-off and contribute to non-point source pollution (see also Section E.16, Hazards and Hazardous Materials, for a discussion of project impacts regarding hazardous materials used during construction). Temporary storage of construction materials and equipment in work areas and staging areas also creates the potential for a release of hazardous materials or sediment to the storm drain system.

Because the proposed project would disturb more than one acre of land, construction activities would be subject to the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ (Construction General Stormwater Permit) issued by the RWQCB including implementation of a site-specific SWPPP required in accordance with this permit. Because storm water from the proposed project site could also be treated at the SFO MLTP, as described in Impact HY-4 (below), construction-related storm water discharges would also be subject to SFO's NPDES permit for discharges from the wastewater treatment plant (Order No. CA0038318).

SFO has prepared an Airport-wide SWPPP that addresses the requirements of the Construction General Storm Water Permit and SFO's NPDES permit for the MLTP.¹²⁴ This SWPPP applies to Airport, tenant, and contractor construction activities, and includes the following objectives:

- Summarize the regulatory background for the SFO SWPPP program
- Provide the background setting and describe the construction program at SFO
- Identify potential construction related sources of storm water pollution
- Present best management practices (BMPs) for reducing construction related storm water pollution
- Provide the framework and rationale for site and task specific SWPPPs
- Establish inspection, monitoring, and record keeping procedures
- Specify and implement training objectives
- Identify non-storm water management procedures
- Identify post-construction storm water management procedures
- Develop a maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed
- Provide guidance for Airport maintenance groups on BMP's, good housekeeping, and training.

Each construction contractor at SFO must prepare and implement a site-specific SWPPP for their construction activities as required by the CCSF Airport Commission Contract Specifications for SFO construction projects, the TIG, and the Airport-wide SWPPP. The site-specific SWPPP must address the minimum requirements of the Construction General Storm Water Permit and also address Airport-specific information specified in the SFO SWPPP. At a minimum, the site-specific SWPPP must:

¹²⁴ San Francisco International Airport, *Storm Water Pollution Prevention Plan for Construction Activities*, WDID # 2 417033001. August 28, 2013.

- Identify potential pollutant sources.
- Include a site map showing the location of planned construction activities, surface water bodies and wetlands within ¼-mile of the construction site, and delineating drainage areas that discharge to the site as well as discharge locations for storm water generated at the site.
- Estimate runoff volumes from the site; identify erosion, wind tracking, and sediment controls.
- Identify discharge monitoring locations; identify methods for management of non-storm water discharges such as uncontaminated pumped groundwater and foundation drains.
- Identify unauthorized storm water discharges and actions that would be taken in the event of an accidental unauthorized discharge.
- Identify post construction storm water management methods.
- Address waste management and disposal, general housekeeping practices, and spill prevention and response.

As part of the site-specific SWPPP, the construction contractor would implement a construction site monitoring program to demonstrate compliance with the discharge prohibitions of the Construction General Storm Water Permit; demonstrate whether non-visible pollutants are present and could contribute to an exceedance of water quality objectives; identify the need for correction actions, additional best management practices (BMPs), or SWPPP revisions; and evaluate the effectiveness of the existing BMPs.

SFO Construction Managers would review the SWPPP and related documents and would inspect construction activities for compliance with SFO storm water requirements. In the event of non-compliance, the SFO Maintenance and Environmental Contractor would implement actions needed to comply with the SFO and state storm water requirements.

With implementation of storm water control measures in accordance with the site-specific SWPPP and construction site monitoring program in accordance with the Construction General Storm Water Permit, SFO NPDES permit for the MLTP, and SFO SWPPP, impacts related to violation of water quality standards or waste discharge requirements as a result of construction-related erosion and releases of hazardous materials would be less than significant.

Discharges of groundwater during construction-related dewatering. Project construction would not require excavation other than for utility trenches and pile driving. Depth to groundwater could be as shallow as 5 feet below ground surface; therefore it is possible some groundwater could flow into the excavations, which would require groundwater dewatering to maintain a dry working area. Discharge of the dewatered groundwater to the SFO storm water collection system could result in violation of the Airport's NPDES permit for the MLTP if it contained sediment or contaminants above permissible levels.

However, the Airport's NPDES permit does allow certain discharges of non-storm water such as groundwater pumped from construction excavations to the MLTP, provided that the discharges are necessary for performance and completion of construction, comply with the BMPs specified

in the SFO SWPPP, and do not cause or contribute to a violation of water quality standards. At SFO, the applicable water quality standards are specified in RWQCB Order No. 99-045.¹²⁵

Accordingly, the site-specific SWPPP for construction activities must include a description of the planned groundwater discharge and BMPs to be implemented to prevent the discharge of sediment-laden or contaminated groundwater that could cause or contribute to exceedance of water quality standards. Groundwater that meets the limitations of RWQCB Order No. 99-045 can be discharged to the storm sewer system in accordance with a permit from the RWQCB. Water with contaminant levels above these limitations, but below the limitations of the sewer system may be discharged to the industrial sewer system. The Airport's Utilities Section must provide written approval for the discharge of dewatering effluent to the Airport's industrial sewer system before discharge can begin. To obtain permission, the construction contractor would need to provide written notification including the reason that an alternative to discharge is not feasible; the estimated quantity of non-storm water to be discharged; the proposed BMPs and control measures; the treatment method, if any; and sampling and analysis conducted to demonstrate that the discharge will be free of suspended sediment and does not contain other contaminants at levels that could cause or contribute to a violation of water quality standards. Once discharge begins, the responsible party and a representative of the Airport Utilities Section must visually monitor the actual discharge and complete a Visual Observation of Authorized Non-Storm Water Discharge form to confirm compliance with the General Construction Storm Water Permit.

Long-Term Storm Water Discharges. Project operation would not alter the quality of storm water runoff from the site. Storm water would continue to discharge from building drains and paved parking areas into the storm water system as it currently does. The project does not include any new sources that could negatively affect water quality.

With compliance with regulations and procedures – including the SFO SWPPP, the General Construction Storm Water Permit, RWQCB Order No. 99-045, and the NPDES permit - construction and operation of the project would not violate water quality standards or substantially degrade water quality. Therefore, this impact would be less than significant.

Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. (No Impact)

The proposed project site is located adjacent to San Francisco Bay in the Westside Groundwater Basin which is used as a municipal groundwater supply for the cities of San Bruno, Daly City, and South San Francisco. However, the proposed project would not interfere with recharge of the

¹²⁵ RWQCB, Order No. 99-045, Adoption of Revised Site Cleanup Requirements and Rescission of Order Nos. 950136, 95-019, 94-044, 92-152, and 92-140 for: The City and County of San Francisco, the United States Coast Guard, and San Francisco International Airport Tenants/Operators for the Property at San Francisco International Airport, San Mateo County.

aquifer because the project site is currently paved, and covered completely with impervious surfaces. Following construction of the proposed building and ancillary facilities, the site would continue to be entirely impervious; therefore, there would be no change in groundwater recharge. Although the project could involve temporary and limited extraction of shallow groundwater for excavation-related dewatering, the proposed project does not include long-term groundwater uses for any reason. Based on this analysis, there would be no impacts related to interference with groundwater recharge and depletion of groundwater resources.

Impact HY-3: The proposed project would not alter the existing drainage pattern of the area in a manner that would result in substantial erosion, siltation, or flooding on- or off-site. (No Impact)

The project site is currently 100 percent paved or covered with structures, and storm water runoff from the site is discharged to the SFO storm water collection system. Following construction, the proposed project site would continue to be covered entirely with impervious surfaces, and storm water runoff would continue to be discharged to the storm water collection system. The proposed building would be on piers above the parking lot. The project would not grade or substantially alter the topography or drainage pattern of the area. Therefore, there would be no alteration of drainage patterns that could result in substantial erosion, siltation, or flooding on- or off-site (no impact).

Impact HY-4: The proposed project would not contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. (Less than Significant)

Storm water at SFO is collected within an Airport-wide storm water drainage system. Much of the storm water runoff is directed to four detention basins that capture all flows during the dry season and the first flush of storm water runoff during the wet season. Sediments and pollutants are allowed to settle out in these ponds. During the dry season, all flows captured in the basins are treated at the MLTP. During the wet season, the gates to the basins are closed once the basins are full, and the remaining relatively contaminant-free runoff is monitored for storm water quality and discharged directly to San Francisco Bay through one of three outfalls. The first flush storm water captured in the detention basins is pumped to the MLTP via pumping stations and culverts for treatment prior to discharge to the Bay. Storm water runoff from the project site is either pumped directly to the treatment plant or discharged directly to the Bay through six outfalls. The MLTP has a capacity of 1.2 million gallons per day (mgd). In 2011, the treatment plant discharged an average daily flow of 0.63 mgd. The highest recorded daily flow was 1.22 mgd, roughly equal to the design flow of 1.2 mgd.¹²⁶

As discussed above in Impact HY-3, the site is currently 100 percent covered with impervious surfaces, and storm water runoff from the site is discharged to the SFO storm water collection

¹²⁶ San Francisco Bay Regional Water Quality Control Board, Revised Tentative Order No. R2-2013-0011, NPDES No. CA0038318. Adopted May 8, 2013.

system. Under the proposed project, the site would also be covered entirely with impervious surfaces, and storm water runoff from the project would continue to be discharged to the storm water collection system. There would be no change in the volume of storm water discharges from the site. Further, in accordance with Article 504 of the TIG, a drainage plan, including hydraulic calculations and profiles of design water surface, would need to be reviewed and approved by SFO's Civil Engineering Section prior to construction.

The proposed office building would not introduce new sources of pollutant runoff to the drainage system. Article 504 of the TIG also requires that storm drainage systems at SFO be designed to prevent oil, grease, and any undesirable liquids, such as those that could accumulate in the Courtyard 3 parking lot, from entering the storm drain system.

For these reasons, the proposed project would not contribute runoff water which would exceed the capacity of the SFO storm water 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 place within a 100-year flood hazard area structures that would impede or redirect flood flows. (Less than Significant)

Airport property is currently included on panels of the 1984 preliminary Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA) for San Mateo County. The 1984 San Mateo County FIRM indicates that the project site is not located within a 100-year flood hazard area.¹²⁷ FEMA has removed the Airport from the recently adopted 2012 San Mateo FIRM and added the Airport to the CCSF Preliminary 2015 FIRM still under preparation.¹²⁸ The preliminary 2015 FIRM identifies the vast majority of Airport property, including the project site, as being inundated by the 100-year flood event. The Airport is in the process of planning additional shoreline protection improvements (refer to Table 3) to address coastal flooding concerns.

The proposed project would construct a building on piles approximately 26 feet above the ground surface. The only structures at ground level within the flood hazard area would be the building piles and a 2,000-sf portion of the building. The presence of these structures would have a negligible effect related to impeding or redirecting potential flood flows and would not exacerbate existing flooding conditions in the vicinity. Additionally, Airport construction would comply with any applicable flood protection building standards provided in the California Building Standards Code. Therefore, this impact would be less than significant.

¹²⁷ URS Corporation, *Flood Hazard Mapping Near SFO based on Federal Emergency Management Agency Preliminary Flood Insurance Rate Map for San Mateo County*, May 2008.

¹²⁸ FEMA National Flood Insurance Program, *Preliminary Flood Map San Francisco County and San Mateo County*, November 12, 2015.

Impact HY-6: The proposed project would not expose people or structures to substantial risk of loss due to flooding, including flooding as a result of the failure of a levee or dam. (Less than Significant)

The project site is not located in an area susceptible to flooding as a result of the failure of a dam or levee; therefore, people or structures would not be exposed to a significant risk of loss, injury or death as a result of implementation of the proposed project and the failure of such structures.¹²⁹ As discussed above in Impact HY-5, the project site is located within the 1 percent annual chance flood hazard (also referred to as the 100-year flood hazard).

For this criterion, the Planning Department considers whether projects located in areas prone to flooding – under existing conditions or future conditions with projected sea-level rise – would expose people or structures to significant risks due to flooding. However, the California Supreme Court has determined that CEQA does not *generally* require lead agencies to consider how existing hazards or conditions might impact a project's users or residents, except where the project would exacerbate an existing environmental hazard.¹³⁰ Accordingly, hazards resulting from a project that places development in an existing or future flood hazard area are not considered impacts under CEQA unless the project would exacerbate the flood hazard. Thus, the analysis below evaluates whether the proposed project would exacerbate existing or future flood hazards in the project area resulting in a substantial risk of loss injury or death.

The proposed project would not include additional stormwater discharges or other discharges that would increase the frequency or severity of flooding and, as discussed above in Impact HY-4, the stormwater drainage systems would adequately convey stormwater flows. Regardless, risks of loss to people or structures would not be substantial because only a 2,000-sf mechanical room would be situated at ground level and subject to potential flooding; occupied areas (the security screening checkpoint, pedestrian walkway, and office areas) would be constructed on piles 26 feet above the ground surface and well above potential flood levels. The proposed project would not cause flooding to occur in areas that would not be subject to flooding without the project for the reasons stated above; therefore, this impact would be less than significant.

Impact HY-7: The proposed project would not expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow. (No Impact)

The project site is not located in a volcanic or steeply sloped area that could be subject to mudflow. Tsunamis are large sea waves that can be generated by large earthquakes. Based on the state's official tsunami inundation maps, the proposed project site is not located within a tsunami

¹²⁹ Association of Bay Area Governments, *Dam Failure Inundation Hazard Map for South San Francisco/Brisbane/ San Bruno*. 1995. Accessed at <http://www.abag.ca.gov/cgi-bin/pickdamx.pl> on August 14, 2013.

¹³⁰ *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369.

inundation zone.¹³¹ A seiche is the oscillation of a water body, such as a bay, that may cause local flooding. A seiche could occur on San Francisco Bay due to seismic or atmospheric activity. However, seiches are rare, and because the project site is not located within a tsunami inundation area, it is also unlikely that the site could be subjected to a seiche. Therefore, there is no impact related to these hazards.

Impact C-HY: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would result in less-than-significant cumulative impacts related to hydrology and water quality. (Less than Significant)

The geographic scope of potential cumulative hydrology and water quality cumulative impacts is the nearby watershed that discharges into lower San Francisco Bay, which is identified as an impaired water body.

As discussed in Impact HY-1, the proposed project could result in adverse water quality effects as a result of erosion or discharge of pollutants in surface water runoff from the site into lower San Francisco Bay. All projects constructed within the watershed have the potential to adversely affect water quality in the Bay and are subject to regulations that require construction storm water BMPs (sites less than one acre) or preparation of a site-specific SWPPP and construction site monitoring program prepared under the Construction General Storm Water Permit (sites over one acre). Similarly, runoff from developed project sites are subject to regulations for storm water control overseen by the RWQCB and local agencies. With compliance with the existing regulatory framework, cumulative impacts related to degradation of water quality would be less than significant.

As discussed in Impact HY-4, the proposed project would not result in a significant change in storm water runoff volume or increase the quantity of storm water-related pollutants discharged to the SFO storm water drainage system once the project is constructed. Therefore, the project's contribution to any potential cumulative impacts on capacity of storm water drainage systems or polluted runoff to San Francisco Bay would not be cumulatively considerable (less than significant).

For the reasons discussed in Impacts HY-5 and HY-6, the proposed project would not impede or redirect flood flows or exacerbate existing flooding conditions in the vicinity. As listed in Table 3, the Airport is planning shoreline protection improvements to address potential flooding risks at the Airport. Accordingly, with implementation of those improvements, no significant cumulative impact would result.

¹³¹ California Emergency Management Agency, California Geological Survey, University of Southern California. *Tsunami Inundation Map for Emergency Planning, San Francisco South Quadrangle/San Mateo Quadrangle (SF Bay)*. June 15, 2009.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
16. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Because the project site is not within a quarter-mile of a school and is not near a private airstrip, Initial Study Checklist criteria E.16(c), and E.16(f) are not applicable.

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 into the environment. (Less than Significant)

Project construction would likely involve the limited use of hazardous materials, such as fuels, lubricants, and solvents. Storage and use of hazardous materials during construction could result in the accidental release of small quantities of hazardous materials, typically associated with minor spills or leaks. Spills and leaks could degrade soil or become entrained in surface water runoff, potentially affecting water quality in nearby downstream water bodies. Although spills and leaks during construction could occur, implementation of construction BMPs required by the RWQCB through its review and approval of the SWPPP (refer to Section E.15, Hydrology and Water Quality) would reduce the potential for accidental releases and ensure timely response to any spills or leaks that may occur. BMPs would require that any hazardous materials be stored, handled, and used in accordance with applicable regulations. All equipment and materials storage would need to be routinely inspected for leaks, and records would need to be maintained for documenting compliance with the storage and handling of hazardous materials. Any release of hazardous materials would be resolved per regulatory requirements. In addition, hazardous materials may be present in subsurface soil and groundwater, which is discussed below under Impact HAZ-2.

Project operation is not expected to involve the routine transport, use, or disposal of hazardous materials, other than small quantities of janitorial cleaning products. These materials would be handled in accordance with the manufacturer's recommended guidelines and in compliance with applicable hazardous materials storage and handling regulations.

With compliance with hazardous materials and construction water quality regulations, the potential impact of the routine transport, use, or disposal of hazardous materials would be less than significant.

Impact HZ-2: The project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; however, it would not create a significant hazard to the public or the environment. (Less than Significant)

The Airport is located on a hazardous materials site, as designated pursuant to Government Code Section 65962.5. The SWRCB GeoTracker¹³² identifies a number of open cleanup program sites at various locations throughout the Airport based on numerous historical releases. As part of the ongoing soil and groundwater remediation program, maps of the estimated location of the contaminated soil and groundwater beneath SFO have been prepared, which indicate the likely

¹³² State Water Resources Control Board, Online database available at [http://geotracker/waterboards.ca.gov](http://geotracker.waterboards.ca.gov). Accessed October 5, 2016.

presence of soil with elevated concentrations of Total Petroleum Hydrocarbons (TPH) at the project site.¹³³

The RWQCB is the regulatory agency overseeing soil and groundwater cleanup at SFO. RWQCB Site Cleanup Order 99-045 provides guidelines for investigation, characterization and remediation of contaminants in soil and groundwater at SFO. The Site Cleanup Order also establishes cleanup levels that allow for various levels of contaminants to remain in place based upon risk assessment criteria for designated remediation management zones. Cleanup levels established for the Human Health Protection Zone, the most stringent cleanup criteria, would be applicable to development of the proposed project.

During project construction, the installation of piles for the building foundation would require the removal of approximately 300 cubic yards of soil. In accordance with RWQCB Site Cleanup Order 99-045 and regulatory requirements, soil would be tested and characterized for disposal at an appropriate landfill facility. Contractors would be required to prepare a health and safety plan and to handle, transport, and dispose of soil containing hazardous materials in accordance with regulations. Similarly, groundwater (if encountered) would require appropriate treatment and handling in accordance with the SWPPP and NPDES permits, as discussed in Section 15, Hydrology and Water Quality.

The proposed building would be primarily constructed on piles above-ground, which would minimize the potential exposure to gases that could accumulate in enclosed building spaces from hazardous materials in soil and/or groundwater beneath the site. Further, the project would be compliant with the site cleanup standards under RWQCB Order No. 99-045 for new construction in the Human Health Zone, which are considered to be protective of future occupants.

With compliance with these regulatory requirements, location of the project on a listed hazardous materials site would not create a significant hazard to the public or the environment and this impact would be less than significant.

Impact HZ-3: The project is located within an airport land use plan area but would not result in a safety hazard for people residing or working in the project area (Less than Significant)

The proposed project would not directly affect aviation activity levels (i.e., aircraft operations) at SFO. The proposed project site is not located within critical airspace or safety zones, as defined by the FAA, and the terminal complex location has been approved by the FAA through the airport layout plan (ALP) review process. The FAA would review the proposed project designs and conduct aeronautical studies, if necessary, to evaluate the potential hazard to air navigation. The proposed project would not be approved until a Determination of No Hazard to Air Navigation is issued by the FAA. The proposed project site is not located within the designated safety zone

¹³³ San Francisco International Airport, 2004. *Estimated Plume Boundaries, Total Petroleum Hydrocarbons in Soil, San Francisco International Airport, SFIA Cost Recovery Plume Areas*. DWG. September, 7, 2004.

as defined in the SFO Airport Land Use Compatibility Plan (ALUCP). The project site is located within Airport Influence Zone B, and subject to the noise, safety, airspace protection, and overflight policies in the ALUCP¹³⁴. As discussed in Impact TR-3, the ALUCP also outlines policies for evaluating proposed land uses with respect to airspace protection to minimize potential safety hazards that could be created through the construction of tall structure. Therefore, the project would not increase safety hazards to people residing or working in the area, and impacts would be less than significant.

Impact HZ-4: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)

As discussed under Impact TR-5, the proposed project would not restrict emergency vehicles from accessing the site or neighboring areas. Project construction and operation would not require closure of adjacent roadways that could be used for emergency response or evacuation. Therefore, the impact would be less than significant.

Impact HZ-5: The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving fires. (No Impact)

The proposed project design and construction would be reviewed by SFO's BICE section to ensure compliance with applicable fire codes, safety standards and regulations. Building operations would be in accordance with the Airport's TIG and do not include any activities that would increase the risk of fire. Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death involving fires, and there would be no impact.

Impact C-HZ: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the project site vicinity, could result in cumulative impacts related to hazards and hazardous materials (Less than Significant).

Potential impacts could result from the project's use of hazardous materials and from encountering contaminated subsurface materials due to its location on a listed hazardous materials site. These impacts would be primarily restricted to the project area and nearby vicinity. The project site and nearby Airport property have been identified as being in a hazardous materials site with known subsurface contamination. The potential impacts associated with the routine use of hazardous materials, an accidental release of hazardous materials used or encountered during project construction, and location on a hazardous materials site listed pursuant to Government Code Section 65962.5 could result in a cumulatively considerable contribution to impacts related to the exposure of construction workers, the public, or the environment to hazardous materials. There are a number of projects listed in Table 3 that would be constructed at the Airport and that would also use hazardous construction chemicals or be

¹³⁴ City/County Association of Governments of San Mateo County. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. November 2012.

constructed in areas of contaminated soil and/or groundwater. However, all development of properties on SFO would be subject to the provisions of RWQCB Cleanup Order No. 99-045, and applicable federal, state and local regulations regarding the storage, use, and disposal of hazardous materials which would substantially reduce these impacts. Accordingly, with compliance with the applicable regulations, no significant cumulative hazardous materials impact would result (less than significant).

Potential airspace safety hazards resulting from project implementation would be limited to people working or residing in the project area. As listed on Table 3, other structures are proposed on Airport property, including a long-term garage, administration facilities building, and hotel. Because all proposed structures would be subject to FAA review prior to project approvals, the project, in combination with other proposed development in the Airport vicinity, would not result in significant cumulative airspace safety hazards.

As discussed in Impact C-TR-2, roadways in the Airport vicinity could experience an increase in traffic volumes and slower moving trucks during the concurrent construction of the proposed project and other cumulative SFO projects. While increased congestion is not anticipated to be so severe as to impede implementation of an emergency response or evacuation plan, projects would be subject to coordination by SFO. Therefore, concurrent construction of the proposed project and other projects in the vicinity would not cause a significant cumulative impact on emergency access (less than significant).

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
17. MINERAL AND ENERGY 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact ME-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, or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. (No Impact)

Based on a review of maps and information from the US Geological Survey¹³⁵ there are no known mineral deposits on Airport property. The proposed project would not result in the loss of availability of a locally important mineral resource recovery site because most of SFO was constructed on imported fill material and any subsurface deposits would be inaccessible due to Airport development. Therefore, the proposed project would have no impact on the availability of mineral resources.

Impact ME-2: The proposed project would not encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner. (Less than Significant)

During project construction, fossil fuels would be used by construction equipment over the course of 18 months. Fuel and energy would be used by construction workers' vehicles and by construction equipment and vehicles during project development. Recycled water would be used for dust control. However, such use would not be wasteful. BMPs would be implemented to ensure that these resources would be used conservatively.

Operation of the proposed project would increase water, fuel, and energy use at the Airport. As discussed in Section E.8, Greenhouse Gas Emissions, SFO has established aggressive goals to achieve net zero energy, zero waste, and carbon neutrality and to reduce greenhouse gas emissions by 50 percent from 1990 levels, and to maximize water conservation.¹³⁶ The project would be designed and constructed to LEED Gold standards, consistent with the California Green Building Standards Code. As a result, the proposed project would not encourage the wasteful use of fuel, water, or energy, and the impact would be less than significant.

Impact C-ME: The proposed project in combination with other past, present, or reasonably foreseeable projects would result in less-than-significant impacts to mineral and energy resources. (Less than Significant)

Because the proposed project would have no impact on known mineral resources or mineral resource recovery sites, it would not contribute to any potential cumulative impact on these resources. The geographic scope of potential cumulative impacts on water and energy resources impacts encompasses the SFPUC water and power distribution area. The SFPUC supplies the City as well as other municipalities in the Bay Area region with water and power. Similar to the proposed project, other past, present, and proposed developments in the region would consume fuel, water, and energy. Present and future cumulative Airport sponsored projects would also be required to comply with the California Green Building Standards Code, at a minimum, and would also be subject to local green building ordinances, which must be as stringent as the state

¹³⁵ United States Geological Survey, Mineral Resources of the San Francisco Bay Region, California, published by the U.S. Geological Survey, Reston, VA. 1975.

¹³⁶ SFIA, Five Year Strategic Plan 2017- 2021.

requirements and are often more stringent. Because these building codes encourage sustainable construction practices related to planning and design, energy efficiency, and water conservation, water and energy consumption would be expected to be reduced compared to conditions without such regulations. Given the numerous developments throughout the entire region, a significant cumulative impact on fuel, water and/or energy resources could result. However, the project's incremental contribution would not be considerable and, therefore, less than significant.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
18. AGRICULTURE AND FOREST RESOURCES— Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined by Public Resources Code Section 4526)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Because the project site is an existing developed area and does not contain farmland, land zoned for agricultural use, forest land, or timberland, none of the above criteria are applicable. None of these land types would be directly or indirectly converted under the proposed project. The California Department of Conservation's (CDOC) Farmland Mapping and Monitoring Program classifies the project area as Urban and Built-Up Land, which includes residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage

treatment, and water control structures.¹³⁷ The project site contains no Prime Farmland, Unique Farmland, Farmland of Statewide Importance, forest, or timberlands; does not support agricultural or timber uses; is not zoned for agricultural or timber uses;¹³⁸ and is not under a Williamson Act contract.¹³⁹

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
19. MANDATORY FINDINGS OF SIGNIFICANCE— Would the project:					
a) Have the potential to 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, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have impacts that would be 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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact MF-1: The project could degrade the quality of the environment, reduce the habitat of or otherwise adversely affect rare or endangered plant or animal species, or eliminate important examples of California history or prehistory. (Less than Significant)

¹³⁷California Department of Conservation. *San Mateo County Important Farmlands, Division of Land Resource Protection, Farmland Mapping and Monitoring Program*, 2008. Internet website: http://redirect.conservation.ca.gov/DLRP/fmmp/county_info_results.asp. Accessed on September 23, 2011.

¹³⁸ San Mateo County, *Zoning Maps for Unincorporated San Mateo County*, available online: [http://www.co.sanmateo.ca.us/planning/zonemap/pdf/zonedocs/zoning%20books/zoning%20bk%2092%20\(urban\).pdf](http://www.co.sanmateo.ca.us/planning/zonemap/pdf/zonedocs/zoning%20books/zoning%20bk%2092%20(urban).pdf), accessed August 26, 2013.

¹³⁹ California Department of Conservation, *Ibid*.

Due in large part to the developed nature of the project site and the surrounding Airport uses, the proposed project is not expected to degrade the quality of the environment, in particular with regard to plant or animal species and habitat. The potential to encounter examples of California history or prehistory is considered low. Therefore, project impacts would be less than significant.

Impact MF-2: The project could have impacts that would be individually limited but cumulatively considerable. (Less than Significant)

Potential cumulative impacts are assessed in the relevant subsections of Section E, Evaluation of Environmental Effects. For the reasons described in Sections E.1 through E.18, the project's contribution to all cumulative impacts on the environment would not be cumulatively considerable (less than significant).

Impact MF-3: The project could have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. (Less than Significant)

This Initial Study did not identify any project-level significant impacts; therefore, the proposed project would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly (less than significant).

F. MITIGATION MEASURES AND IMPROVEMENT MEASURES

No mitigation measures have been required as part of this project. The Airport has agreed to implement the following improvement measure to further reduce less-than-significant impacts of the project.

Improvement Measure I-TR—Coordinated Construction Traffic Control Plan

SFO shall ensure that the construction contractor prepares and successfully implements a construction traffic control plan that would include project-specific measures to reduce potential impacts on traffic flows on roadways affected by project construction and other Airport projects under construction concurrently with the proposed project. These roadways are US 101, I-380, South Airport Boulevard, San Bruno Avenue, and North McDonnell Road. SFO and construction contractors would also coordinate with local jurisdictions, transit agencies, Caltrans, and the public, on affected roadways and intersections. The traffic control plan shall include the following to the extent applicable:

- Flaggers or signs would guide vehicle and other traffic (pedestrian and bicycles) through or around the construction zone.
- The contractor would maintain access for emergency response vehicles at all times.
- Truck routes designated by cities and counties would be identified in the traffic control specifications. Haul routes should minimize truck traffic on local roadways

and residential streets. For project work that requires oversized or excessive load vehicles on the State Highway System, the contractor would be responsible for obtaining a Transportation Permit from Caltrans.

- Large truck and delivery trips shall be scheduled outside the peak morning and evening commute hours, and outside on-site peak traffic hours for airport passenger loading.
- Construction, particularly related to lane closures, would be coordinated with local transit service providers.
- On-going and up-to-date information relating to the construction schedule and affected roadways and intersections, particularly lane closures, and a contact person, should be provided to the public, through timely press releases or other media messaging.
- Where it is feasible and safe to do so, existing pedestrian and bicycle access and circulation would be maintained at all times. If access and circulation cannot be maintained, detours would be designated and posted for pedestrians and bicyclists.
- All construction equipment and materials would be stored in designated contractor staging areas on or adjacent to the worksite on Airport property, in a manner that minimizes obstruction of traffic.
- Public roadways would be repaired or restored to their original conditions upon completion of construction.
- The traffic control plan would conform to the *California Manual on Uniform Traffic Control Devices: Part 6, "Temporary Traffic Control."* Traffic plans may require Caltrans, San Mateo County, SFO Traffic Engineering, and city review or approval.

G. PUBLIC NOTICE AND COMMENT

To be completed after PMND public review period.

H. 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 M. Gibson
Environmental Review Officer
for
John Rahaim
Director of Planning

DATE 5/24/17

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