1499 Old Bayshore Highway Project Initial Study/Mitigated Negative Declaration

Prepared for:

City of Burlingame
Planning Division
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Burlingame, CA 94010
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Acronyms and Abbreviations

2040 General Plan	*Envision Burlingame General Plan*
ACIP	auger cast-in-place
APN	Accessor Parcel Number
BART	Bay Area Rapid Transit
Bay Trail	San Francisco Bay Trail
Bay	San Francisco Bay
CAA	Clean Air Act
CalEPA	California Environmental Protection Agency
CH_4	methane
City	City of Burlingame
CNEL	community noise equivalent level
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CUPA	Certified Unified Program Agency
dB	decibel
dBA	A-weighted decibels
DOT	Department of Transportation
DTSC	California Department of Toxic Substances Control
DTSC	Department of Toxic Substances Control
EPA	Environmental Protection Agency
FAR	floor-area ratio
GIS	Geographic information system
gsf	gross square feet
GWP	global warming potential
HFCs	Hydroflourocarbons
I-	Interstate
I/I	Innovation Industrial
I-I	Innovation-Industrial
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
KW	kilowatt
L_{eq}	1-hour equivalent sound level
LID	low-impact development

LUST	leaking underground storage tank
msl	mean sea level
N_2O	nitrous oxide
N_2O	Nitrous Oxide
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PFCs	perfluorocarbons
ppd	pounds person per day
PPV	peak particle velocity
Project	1499 Old Bayshore Highway Project
Project site	1499 Old Bayshore Highway and 801 and 825 Mahler Road
R&D	Research and Development
RCRA	Resource Conservation and Recovery Act of 1976
SACOG	Sacramento Area Council of Governments
SamTrans	San Mateo County Transit District
SB	Senate Bill
SF_6	sulfur hexafluoride
SFO	San Francisco International Airport
Shorebird Sanctuary	City of Burlingame Shorebird Sanctuary
SLR	sea level rise
SMX	soil-cement mixed
SWPPP	Stormwater Pollution Prevention Plan
TDM	Transportation demand management
TDP	torque-down pile
TNM	traffic noise model
TSCA	Toxic Substances Control Act
US 101	U.S. Highway 101

Chapter 1
Background

1. **Project Title:**

   1499 Old Bayshore Highway Project

2. **Lead Agency Name and Address:**

   City of Burlingame
   Planning Division
   501 Primrose Road
   Burlingame, CA 94010

3. **Contact Person and Phone Number:**

   Catherine Keylon, Senior Planner
   Planning Division
   501 Primrose Road
   Burlingame, CA 94010
   (650) 558-7252

4. **Project Location:**

   1499 Old Bayshore
   Burlingame, CA 94010

5. **San Mateo County Assessor's Parcel Number:**

   Assessor's Parcel Numbers: 026-322-150, 026-322-050

6. **Project Sponsor's Name and Address:**

   Helios Real Estate Partners
   Attn: Peter Banzhaf
   44 Montgomery Street, 3rd Floor
   San Francisco, CA 94104

7. **General Plan Designation:**

   Innovation-Industrial (I-I)

8. **Zoning**

   Innovation-Industrial (I-I)

9. **Description of Project:**

   Please refer to Chapter 2, *Introduction/Project Description*.

10. **Surrounding Land Uses and Setting:**

    The surrounding land uses near the Project site include mostly commercial, office, and industrial land uses. Open space and recreational land uses (San Francisco Bay Trail) are located east of the

Project site, and a school (The Avalon Academy) as well as the Burlingame Music School is located north of the Project site.

11. **Other Public Agencies Whose Approval May Be Required (e.g., permits, financing approval, participation agreement), Potential Responsible Agencies, and Trustee Agencies:**

    The following approvals may be required for the Project:

    - Design review for construction of new commercial buildings (City of Burlingame Municipal Code [Municipal Code] Section 25.40.020) Planning Commission will consider design features, compatibility with nearby structures, and character.
    - Planning Commission approval of community-benefit bonuses for Tier 3 projects (Municipal Code Chapter 25.40.030[B][3])
    - San Francisco Bay Conservation and Development Commission Permit for work within 100 feet of the San Francisco Bay shoreline.
    - Federal Aviation Administration Determination of No Hazard to Air Navigation for 24 Aeronautical Study Numbers.
    - City/County Association of Governments of San Mateo County, Congestion Management Agency Project review for consistency with the San Mateo County Congestion Management Plan.

12. **Have California Native American tribes that are traditionally and culturally affiliated with the Project area requested consultation, pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?**

    On June 20, 2023, ICF, on behalf of the City, submitted a request to the Native American Heritage Commission (NAHC) to review its Sacred Lands File (SLF) for the Project site. The NAHC is the official State repository of Native American sacred site location records in California. ICF received a response on July 6, 2023, from the NAHC, stating that, "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative." A list of nine tribal contacts was provided with the NAHC response.

    On August 30, 2023, the City sent letters to each of the nine contacts from the list provided by the NAHC and to Native American contacts that had previously requested to be contacted by the City for potential consultation informing them of the Project and formally inviting them to consultation pursuant to PRC Section 21080.3.1(i.e., AB 52). Letters containing details about the Project and a location map were sent to the nine representatives from the following six tribal groups: Amah Mutsun Tribal Band of Mission San Juan Bautista; Costanoan Rumsen Carmel Tribe; Indian Canyon Mutsun Band of Costanoan; Muwekma Ohlone Indian Tribe of the SF Bay Area; The Ohlone Indian Tribe; and the Wuksachi Indian Tribe/Eshom Valley Band.

    The City did not receive any requests for consultation during the 30-day notification period. Therefore, the City has determined that the consultation process is concluded, pursuant to PRC Section 21080.3.1(i.e., AB 52) and PRC Section 21084.3.

Chapter 2
Introduction/Project Description

2.1 Introduction

The 1499 Old Bayshore Highway Project (Project) would be located at 1499 Old Bayshore Highway and at 801 and 825 Mahler Road (Project site). The two parcels associated with these addresses (Accessor Parcel Numbers [APNs]: 026-322-150 and 026-322-050) cover 2.97 acres in the northern portion of the City of Burlingame (City). The entire Project site is currently occupied by two (2) two-story office buildings and one single-story warehouse building. The 1499 Old Bayshore Highway and 801 Mahler Road parcel includes two existing two-story office building (constructed in 1962) with surface parking and minimal interior landscaping. The front of the site contains a two-story office building that will be demolished prior to Project construction to function as construction-worker parking associated with a separate, nearby project. The 825 Mahler Road parcel includes the single existing concrete tilt-up warehouse building (constructed in 1960–1962) with surface parking and minimal interior landscaping. All buildings are currently vacant.

The Project would demolish the remaining two buildings, merge the two parcels, and construct an office and office/research-and-development (R&D) building with parking. The proposed office/R&D building would be sited at the front of the Project site, along Bayshore Highway; the height would be eight stories tall, and the area approximately 314,921 gross square feet (gsf). Parking would be provided behind the proposed building, along Mahler Road, in a standalone, seven-story, approximately 208,423-gsf aboveground parking garage with approximately 639 parking spaces.

2.1.1 Existing Setting

The Project site comprises two parcels within the northern portion of the city, near the San Francisco Bay and Mills Creek, at 1499 Old Bayshore Highway and 801 and 825 Mahler Road (Figure 1). The Project site lies directly adjacent to various retail, commercial, office, industrial, and educational uses. To the north of the Project site are Burlingame Music School, Avalon Academy, a special-education school (approximately 65 feet from the Project site), and Peninsula High School, a public alternative high school (approximately 0.25 mile from the Project site). To the east of the Project site, across Old Bayshore Highway, are the City of Burlingame Shorebird Sanctuary (Shorebird Sanctuary), the San Francisco Bay Trail (Bay Trail), and the Bay Landing Hotel. To the south of the Project site are Mills Creek and other innovation and industrial uses (i.e., Wheelchairs and San Mateo, Harry's Carpets, Inc., and Road Runners Rapid Express, Inc.). To the west of the Project site are innovation and industrial uses (including Build Ur Dream Builders, Inc). Further southeast of the Project site (0.50 mile) is Bayside Park. In addition, the Project site is in the vicinity of two large-scale transportation uses: the San Francisco International Airport (SFO) is approximately 0.90 mile to the north, and U.S. Highway 101 (US 101) is approximately 0.20 mile to the west. The Project site is also approximately 1 mile from the Millbrae multimodal transit station, which provides Caltrain, Bay Area Rapid Transit (BART), San Mateo County Transit District (SamTrans), and additional transit and shuttle services.[1] Northbound and southbound SamTrans (Route 292) stops are within 0.25 mile of the Project site (Figure 2).

[1] Caltrain. 2023. *Millbrae Transit Center*. Available: http://www.caltrain.com/stations/millbraetransitcenter.html. Accessed: July 18, 2023.

Graphics ... 104714 (07-18-2023) JC

Figure 1
Project Location
1499 Old Bayshore Highway

Source: Helios Real Estate Partners / King Street Properties.

Graphics ... 104714 (11-06-2023) JC

ICF

Figure 2
Project Site and Vicinity
1499 Old Bayshore Highway

2.1.2 Land Use and Zoning

On January 7, 2019, the City adopted its *Envision Burlingame General Plan* (2040 General Plan), which updated the City's previous general plan, including vision, goals, policies, and land use designations, to provide direction for the City's growth through 2040.[2] The Project site is within the Innovation Industrial (I/I) land use designation. According to the 2040 General Plan, the I/I land use designation encourages the creation of light industrial and logistics centers with complementary commercial businesses. Some of the permitted uses for the I-I land use designation include commercial, light industrial, creative industry businesses, design businesses, limited indoor sports and recreation, and wholesale uses. The Burlingame, California Municipal Code (Municipal Code), which implements the 2040 General Plan, was also updated to include the new I-I zoning designation (Municipal Code Chapter 25.12), and the Project site is within the I-I zoning designation. The I-I zone accommodates and encourages diverse and compatible light industrial, office, R&D, and creative business enterprise uses to enrich the lives of residents, employees, and visitors and to increase employment opportunities, while providing opportunities for a variety of commercial and industrial business types that contribute to the stability of the City's economy.[3]

A project may develop at one of three floor-area ratio [FAR] categories, or tiers, ranging from Base Standard Intensity (Tier 1) to Maximum Intensity (Tier 3): the Project is proposed as a Tier 3 project. Tier 3 projects within this zone and with frontage along Old Bayshore Highway may reach a maximum FAR of 2.75 and may exceed a maximum height of 65 feet with approval of a Special Permit by the Burlingame Planning Commission. Such projects must fulfill specific development standards and community benefit thresholds, as well as meet Special Permit findings for community benefit objectives for development under Tier 3. Within this area, developments must be set back a minimum of 10 feet from the curb along the front of the highway and 10 feet on the sides and rear. In addition, developments are subject to landscaping and lot-coverage standards, which require at least 15%of the site to be covered in landscaping and a maximum lot coverage of 70%, respectively (Municipal Code Title 25).

2.2 Description of Proposed Project

The Project would include the construction of approximately 314,921 gsf of office and R&D space, with a seven-story parking structure on a 2.97-acre site. The Project would include the following components.

- An eight-story, approximately 314,921-gsf office/R&D building (148-feet tall).
- A seven-story parking structure with 639 parking spaces (78-feet tall).
- A 6,900-gsf public plaza that would provide opportunities for recreation, gathering, and collaborating.
- A 2,500-gsf café on the ground floor of the proposed building.

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2 City of Burlingame. 2019. General Plan Update. *Envision Burlingame General Plan*. Available: https://www.burlingame.org/departments/planning/general_plan_update.php. Accessed: July 18, 2023.

3 City of Burlingame. 2021. City of Burlingame Zoning Map. Available: https://cms6.revize.com/revize/burlingamecity/Zoning%20Map%20-%202021.pdf. Accessed: July 18, 2023.

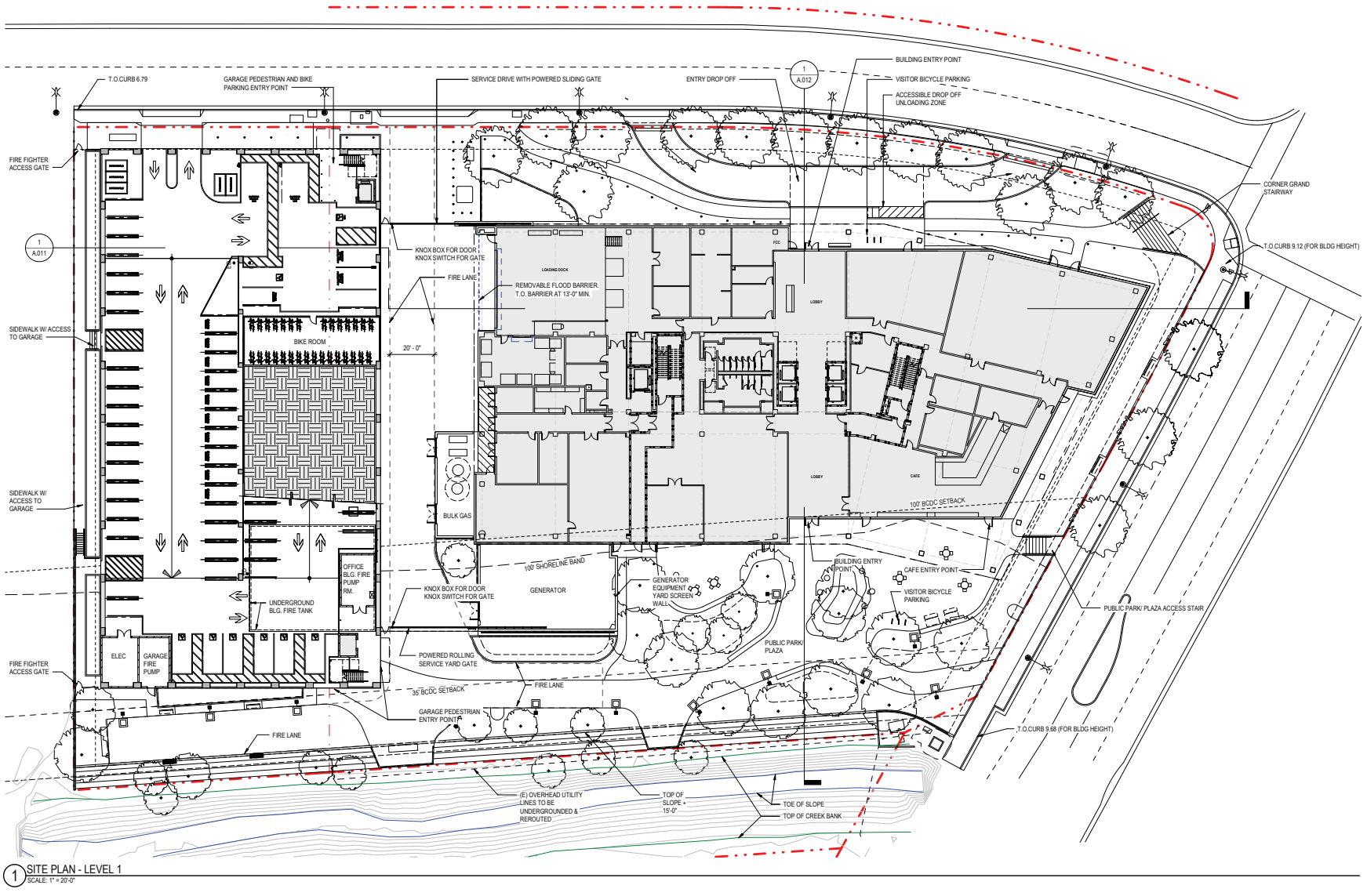
- Sixty long-term bicycle spaces (inside the parking structure) and 12 short-term bicycle spaces, for a total of 72 bicycle parking spaces.
- Four-hundred linear feet of improvements to Mills Creek Public Trails.
- Four-hundred linear feet of Mills Creek sea-level-rise (SLR) infrastructure that would provide long-term flood protection, shoreline resilience, and underground overhead power lines.
- Site-specific public art in one or more locations.

Figure 3 through Figure 8 show the proposed site plan, elevations, and renderings for the Project.

2.2.1 Project Features

All existing features associated with the Project site would be removed, and a new, approximately 314,921-gsf office and R&D building with an associated seven-story parking structure would be constructed. The Project would merge two adjacent parcels. The combined parcels would include an eight-story, approximately 148-foot-tall, 314,921-gsf office and R&D building and a seven-story, approximately 79-foot-tall, 208,424-gsf parking structure with 639 total parking spaces. The ground floor of the office and R&D building would include a lobby and tenant amenities.

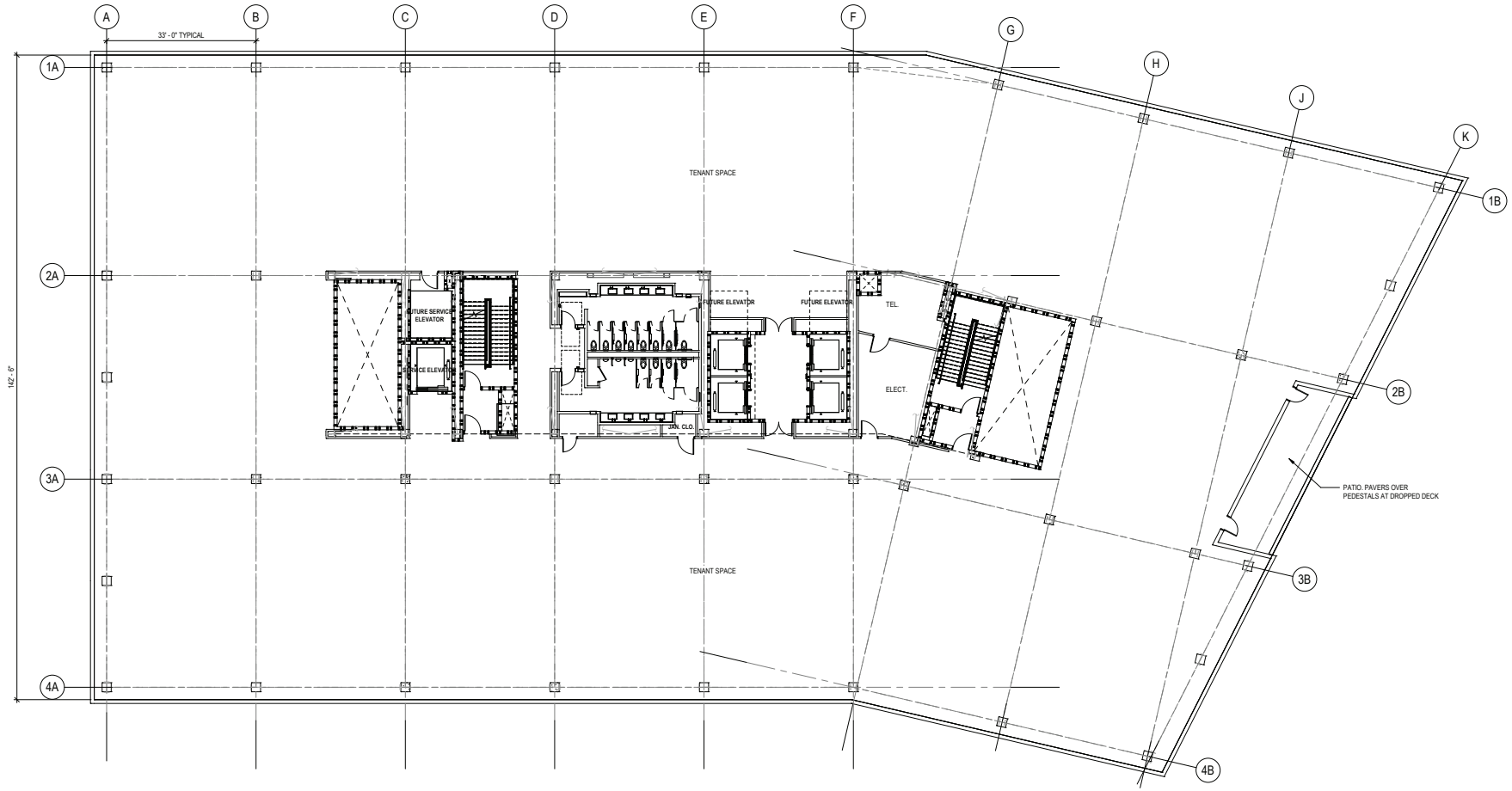
Project development would provide 5,642 gsf of ground floor lobby and tenant amenity space. The ground floor would also provide for utility uses, such as trash rooms, loading facilities, electrical rooms, and generator and substation spaces. Twelve short-term bicycle parking spaces would be sited along open spaces on the ground floor, and 60 long-term bicycle parking spaces would be sited within the parking structure. To address flooding issues, the Project proposes to raise the Project site base elevation to 13 feet above sea level and install a permanent sea wall at 15.5 feet above sea level along Mills Creek, which would provide a 1.5-foot-tall wall from the open space courtyard. The Project also proposes to increase the perviousness of the site from 10,011 square feet to 26,192 square feet. Grade surfaces would be sloped to ensure positive draining from all structures.



Source: Helios Real Estate Partners / King Street Properties.

Graphics ... 104714 (11-06-2023) JC

Figure 3
Site Plan, Level 1 (Ground Level)
1499 Old Bayshore Highway

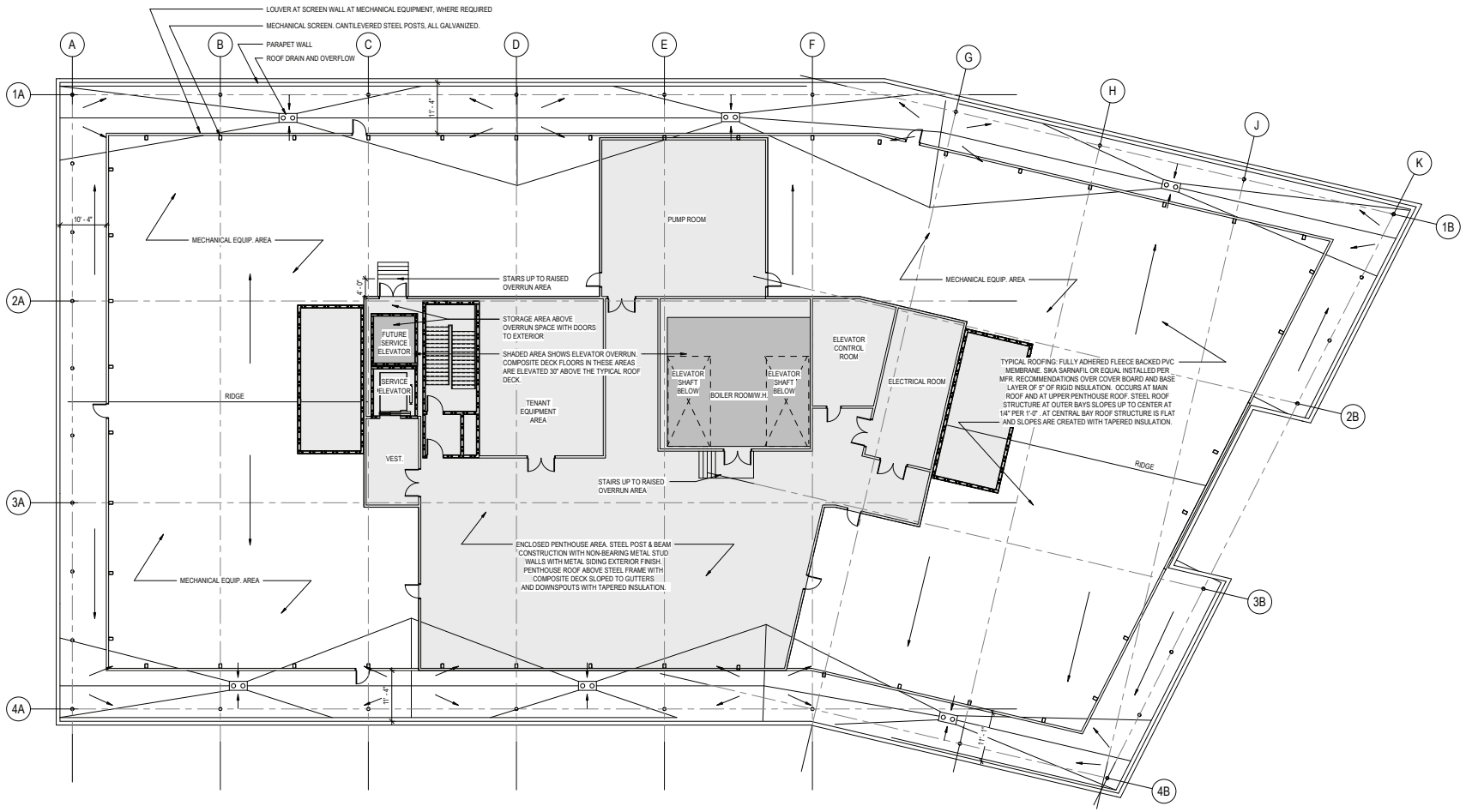


1 TYPICAL FLOOR PLAN - LEVELS 3 - 8
SCALE: 3/32" = 1'-0"

Source: Helios Real Estate Partners / King Street Properties.

Graphics ... 104714 (11-03-2023).JC

Figure 4
Site Plan, Levels 3–8 Floor Plan
1499 Old Bayshore Highway

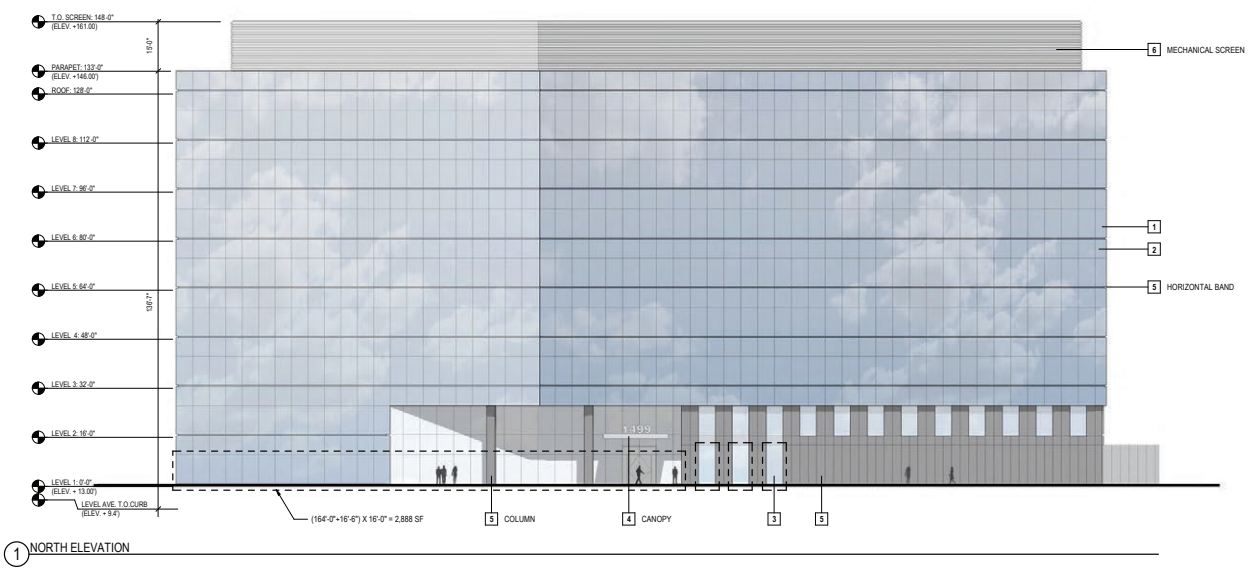


1 ROOF PLAN
SCALE: 3/32" = 1'-0"

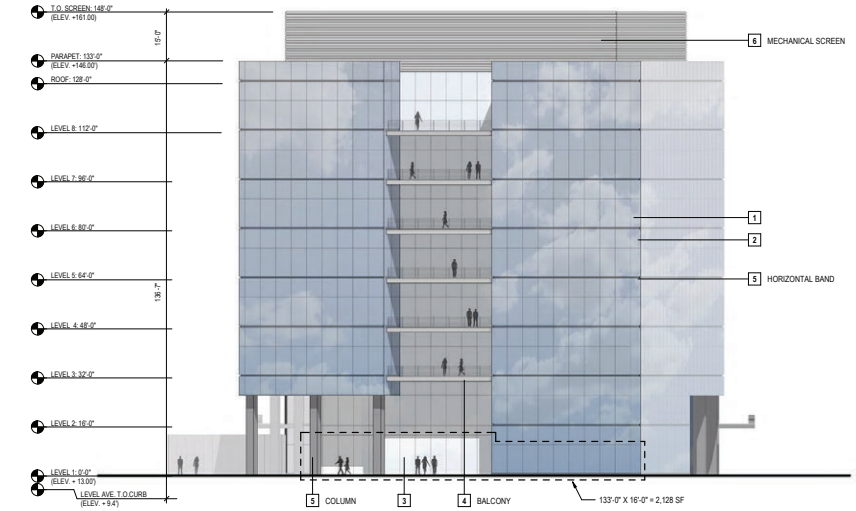
Source: Helios Real Estate Partners / King Street Properties.

Graphics ... 104714 (11-06-2023) JC

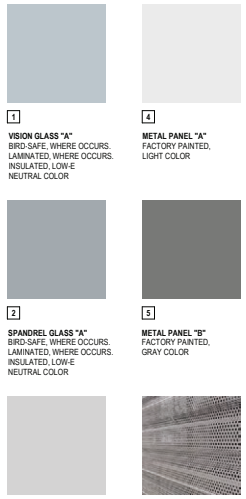
Figure 5
Site Plan, Roof Plan
1499 Old Bayshore Highway



1 NORTH ELEVATION



2 EAST ELEVATION



BIRD SAFE BUILDING TREATMENTS

1. EXTERIOR GLAZING IS COMPOSED OF 45% OPAQUE GLAZING. GLAZING IS HIGH-PERFORMANCE TO MEET T24 ENERGY REQUIREMENTS AND INCLUDES.
2. EXTERIOR GLAZING SYSTEM UTILIZES SHADOW BOXES (RECESSED SURFACES) TO VARIGATE EXTERIOR APPEARANCE.
3. MULLION EXTENSIONS ARE PROVIDED IN A RANDOM PATTERN TO BREAK UP EXTERIOR EXPANSES OF GLASS.
4. EXTERNAL LIGHTING WILL BE MINIMIZED AND SHIELDED.
5. LEVEL 1 AND 2 IS RECESSED FROM THE UPPER FLOORS.

GROUND FLOOR TRANSPARENCY

TOTAL FACADE ALONG MAHLER AND OLD BAYSHORE HWY:
448'-0" X 16'-0" = 7,168 SF

TOTAL CLEAR GLAZING ALONG MAHLER:
(164'-0" X 10'-0") + 3(13'-0" X 5'-6") = 1,854 SF

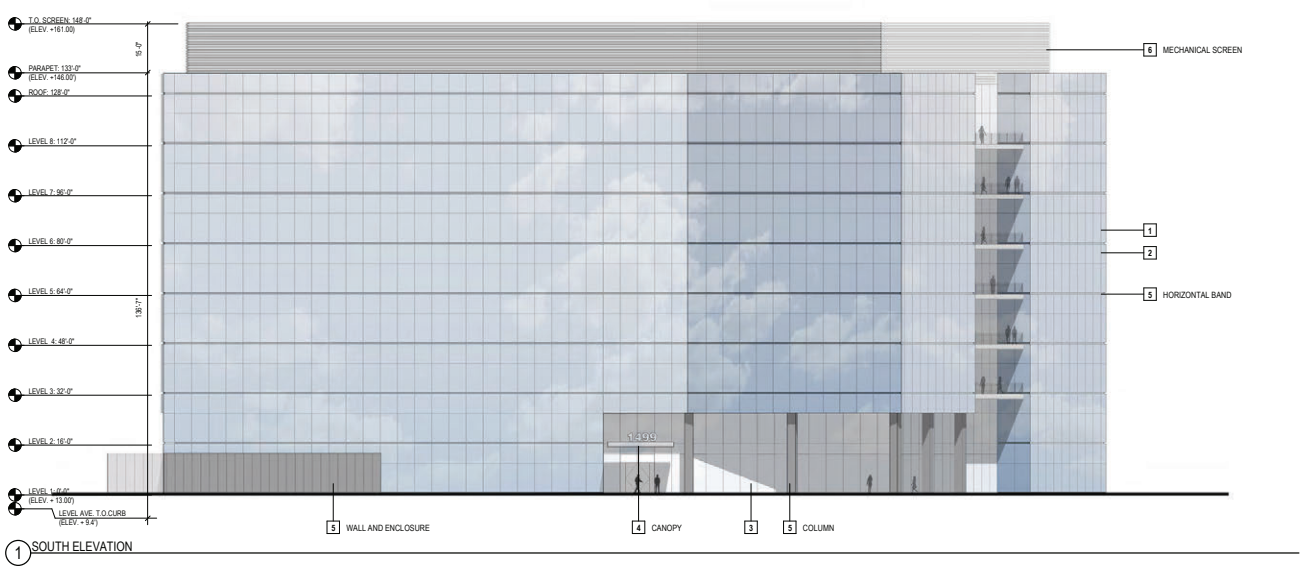
TOTAL CLEAR GLAZING ALONG OLD BAYSHORE HWY:
(66'-0" X 13'-0") + (67'-0" X 10'-0") = 1,528 SF

TOTAL CLEAR GLAZING ALONG MAHLER AND OLD BAYSHORE HWY:
1,854 SF + 1,528 SF = 3,382 SF / 7,168 SF = 47% > 25%

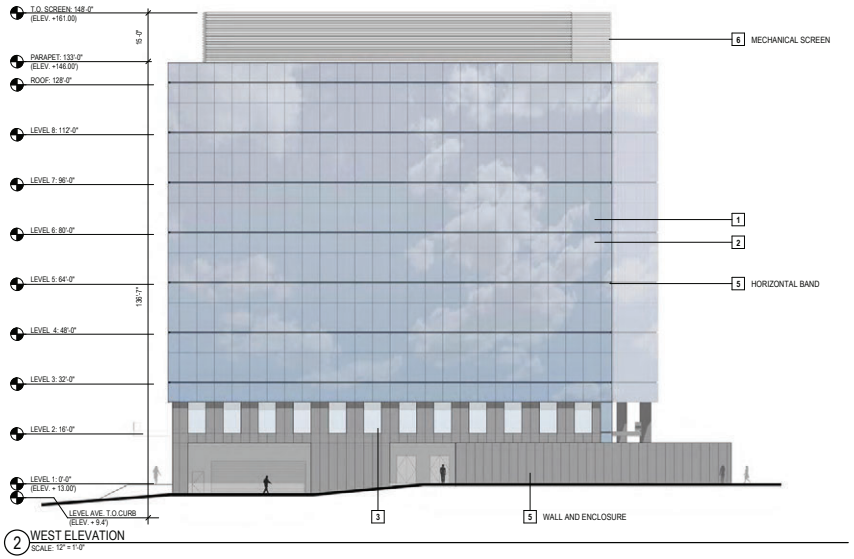
Source: Helios Real Estate Partners / King Street Properties.

Graphics ... 104714 (11-06-2023) JC

Figure 6
North and East Exterior Elevations
1499 Old Bayshore Highway



1 SOUTH ELEVATION



2 WEST ELEVATION
SCALE: 12" = 1'-0"

1

VISION GLASS "A"
BIRD-SAFE, WHERE OCCURS. LAMINATED, WHERE OCCURS. INSULATED, LOW-E
NEUTRAL COLOR

4

METAL PANEL "A"
FACTORY PAINTED, LIGHT COLOR

2

SPANDREL GLASS "A"
BIRD-SAFE, WHERE OCCURS. LAMINATED, WHERE OCCURS. INSULATED, LOW-E
NEUTRAL COLOR

5

METAL PANEL "B"
FACTORY PAINTED, GRAY COLOR

3

VISION GLASS "B"
BIRD-SAFE, WHERE OCCURS. LAMINATED, WHERE OCCURS. INSULATED, LOW-E
NEUTRAL COLOR

6

CORRUGATED PERFORATED METAL PANEL
SILVER/GRAY COLOR

BIRD SAFE BUILDING TREATMENTS

1. EXTERIOR GLAZING IS COMPOSED OF 45% OPAQUE GLAZING. GLAZING IS HIGH-PERFORMANCE TO MEET T24 ENERGY REQUIREMENTS AND INCLUDES.
2. EXTERIOR GLAZING SYSTEM UTILIZES SHADOW BOXES (RECESSED SURFACES) TO VARIGATE EXTERIOR APPEARANCE.
3. MULLION EXTENSIONS ARE PROVIDED IN A RANDOM PATTERN TO BREAK UP EXTERIOR EXPANSES OF GLASS.
4. EXTERNAL LIGHTING WILL BE MINIMIZED AND SHIELDED.
5. LEVEL 1 AND 2 IS RECESSED FROM THE UPPER FLOORS.

GROUND FLOOR TRANSPARENCY

TOTAL FACADE ALONG MAHLER AND OLD BAYSHORE HWY:
448'-0" X 16'-0" = 7,168 SF

TOTAL CLEAR GLAZING ALONG MAHLER:
(164'-0" X 10'-0") + 3(13'-0" X 5'-6") = 1,854 SF

TOTAL CLEAR GLAZING ALONG OLD BAYSHORE HWY:
(66'-0" X 13'-0") + (67'-0" X 10'-0") = 1,528 SF

TOTAL CLEAR GLAZING ALONG MAHLER AND OLD BAYSHORE HWY:
1,854 SF + 1,528 SF = 3,382 SF / 7,168 SF = 47% > 25%

Source: Helios Real Estate Partners / King Street Properties.

Graphics ... 104714 (11-06-2023) JC

Figure 7
South and West Exterior Elevations
1499 Old Bayshore Highway

Source: Helios Real Estate Partners / King Street Properties.

Graphics ... 104714 (11-06-2023) JC

Figure 8
Building Rendering
1499 Old Bayshore Highway

2.2.2 Access and Circulation

The Project would feature a passenger drop-off zone and main lobby entrance on the ground floor of the northern side of the building, along Mahler Road. An additional ground-floor lobby entrance on the south of the Project would be adjacent to the open space, and other ground-floor entrances would be available for tenants of the Project. The open spaces surrounding the Project also would be accessible from entrances on the ground floor to the north and south of the Project. To provide sufficient emergency access to the Project site, a total of approximately seven fire-staging areas would be on site, with emergency and service vehicle access between the office building and parking structure. A hammerhead turn is also provided for a fire truck to complete a 180-degree turn, should it be necessary. There also would be requisite vehicle turning space for passenger cars, 30-foot trucks, and 40-foot semi-trailer trucks that would use the loading dock.

2.2.3 Transportation Demand Management

To support travel by sustainable modes and reduce the number of single-occupant vehicle trips that the Project generates, transportation-demand management (TDM) measures would be implemented as a part of the Project, pursuant to Burlingame's TDM regulations (Municipal Code Chapter 25.43). The TDM plan prepared for the Project, provided as Appendix A, *Transportation Demand Management Plan*, of this document, includes design features, programs, and services that promote sustainable modes of transportation. Proposed TDM measures, as described in greater detail in Appendix F, include the following.

- Free/Preferential Parking for Carpools (M1).
- TDM Coordinator / Contact Person (M3).
- Actively Participate in Commute.org or Transportation Management Association (TMA) Equivalent (M4).
- Carpool or Vanpool Program (M5).
- Transit or Ridesharing Passes/Subsidies (M6).
- Pre-Tax Transportation Benefits (M7).
- Secure Bicycle Storage (M8).
- Design Streets to Encourage Bike/Ped Access (M9).
- Showers, Lockers, and Changing Rooms for Cyclists (M25).
- Pedestrian Oriented Uses and Amenities on Ground Floor.

2.2.4 Building Design and Lighting

The Project's roof area would include maintenance and service uses, such as electrical rooms, equipment rooms, and service elevators. The roof area would also contain a penthouse with a membrane roof sloped to gutters and downspouts with tapered insulation.

Given the height of the proposed building and parking structure, eight (approximately 148 feet) and seven (approximately 78 feet) stories respectively, the Project would be visible from adjacent streets. The ground floor (i.e., Level 1) of the proposed office building would include a mix of office,

storage, maintenance, loading, and amenity uses (i.e., lobby, café, and conference rooms). Floors 2 through 8 would support a mix of R&D and office uses, with tenants to be determined. The seven-level parking structure would be sited adjacent to the proposed office/R&D building, along Mahler Road. The exterior of the proposed office/R&D building would be composed of glass and metal panels. The rear parking structure would be constructed with a concrete moment frame with concrete beams and columns that are open allowing a view into each parking level. The structure would include details and accents with perforated metal screens and a metal canopy at the entrance. Exterior lighting would be limited to landscape, safety, and circulation lighting. To create a bird-safe building, the following treatments are proposed.

- Exterior glazing would be composed of 45% opaque glazing.
- External lighting would be minimized and shielded.
- Portions of Levels 1 and 2 would be recessed from the upper floors.
- Bird-safe frit will be used on all exterior glazing on the office/R&D building up to 64 feet above grade. This frit pattern will consist of a permanent ¼-inch gray ceramic dot pattern on a 4-inch by 2-inch grid (with a horizontal spacing of 4 inches and vertical spacing of 2 inches) applied to the exterior surface of the glass.

2.2.5 Landscape and Open Space

A total of 11 trees exist on the Project site, including six different species, two of which (4 trees in total) are protected by the City: red ironbark (*Eucalyptus sideroxylon*) and Japanese black pine (*Pinus thunbergii*). All of the existing 11 onsite trees, including the four protected trees, would be removed with Project implementation. To compensate for the removal of protected trees, Municipal Code Chapter 11.06.090, *Tree Requirements and Reforestation*, requires trees to be planted at a ratio of 3:1 when using 15-gallon trees, 2:1 when using 24-inch trees, and 1:1 when using 36-inch trees. The Project would include planting 35 trees throughout the site and nearby streetscapes in areas that would be accessed by tenants and the public.

The Project would include approximately 6,900 square feet of publicly accessible open space in the form of an outdoor plaza on the southeastern side of the Project site. The plaza would provide public bicycle parking, social spaces, outdoor seating, landscaping, and interpretive panels. The plaza would provide access to Mills Creek, which abuts the southern property line of the Project. To allow visitors to observe the tidal creek, the Project would construct more than 400 feet of public trails along the entire Mills Creek frontage. Improvements would include two creek overlooks, interpretive panels, multiple seating areas, native landscaping, and pedestrian lighting. These improvements would be accessed via new street sidewalks; an existing pedestrian crossing at the northeastern point of the property, which provide access to the San Francisco Bay Trail; and an existing bus stop to the south of the Project. The open space also provides four prospective locations for public art installation. All Project work along Mills Creek would be set back 2-feet from the top of bank.

The City does not have any established open space requirement standards for the I-I zoning district; however, the City does have an established minimum landscape coverage requirement of 20% of a site within the I-I zoning district. Approximately 27.4% of the Project site would be covered in landscaping in accordance with Municipal Code Chapter 25.36.040, which would fulfill the city's minimum landscaping requirement.

2.2.6 Utilities

Utilities for the Project, consisting of electric, stormwater, drinking/irrigation water, and wastewater, would connect to existing utility infrastructure.

The proposed building would be all electric and would not include natural gas appliances or plumbing. Four 600-kilowatt (KW) diesel generators would be installed to provide Municipal Code–required emergency and optional standby loads. The generators would be sited on the ground level, in an exterior generator yard, adjacent to the office/R&D building. The total generator capacity would be 2,400 KW. While the Project site has existing overhead utility distribution lines along the southeast and southwest property lines (southwest, the lines run between 801 and 825 Mahler Road), PG&E plans to underground the lines dividing the Project site as a separate project, but concurrent with Project construction to minimize construction-related disruptions.

The Project site would treat stormwater on site, in accordance with low-impact development (LID) treatment measures and mechanical treatment, per the National Pollutant Discharge Elimination System (NPDES) program. Treated stormwater would drain through three existing 18-inch storm drain outfalls along Mahler Road and Old Bayshore Highway, and into Mills Creek. Water connections would be provided with emergency-fire water access to the existing 12-inch lines along Old Bayshore Highway and 10-inch lines on Mahler Road; building water and irrigation water access would connect to the existing water lines within Mahler Road. Sanitary sewer services would be provided to the parking garage and office/R&D building by the existing sewer line in Mahler Road.

2.2.7 Construction Methods and Activities

Proposed construction methods are considered conceptual and subject to City review and approval. For the purposes of this Initial Study/Mitigated Negative Declaration (IS/MND), the analysis considers the following construction plan.

The Project proposes to be built utilizing a deep-foundation systems including auger cast-in-place (ACIP) piles and ground-improvement systems include large-diameter, soil-cement mixed (SMX) columns. These deep foundations are required because existing soil conditions were explored and found to be primarily comprised of Bay Mud deposits. No significant excavation of these deposits is required because the Project proposes to raise the base elevation of the existing grades by 5 feet to meet a 13-foot base elevation for sea level rise. To account for water supply for the building's fire pump room, there would be a water storage tank that extends 7 feet below grade with a smaller sump pit that extends 8 feet below this; excavation related to this feature would extend to 15 feet below grade. During excavation of for this feature and related utility trenching, a passive dewatering system, in which water is collected from a series of trench drains around the perimeter and across the base of the excavation, would be required temporarily.[4]

2.2.7.1 Construction Equipment and Staging

Equipment used during project construction would include excavators, skid steers, loaders, bulldozers, backhoes, rollers, scrapers, forklifts, cranes, compressors, boom pumps, trowels, backpack vibrators, boom lifts, scissor lifts, skip loaders, and pavers. During construction and

[4] Rockridge Geotechnical. 2022. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation 1499 Old Bayshore Highway Burlingame, California. January 11.

demolition, pickup trucks and water trucks would make several trips to and from the Project site. Construction laydown and staging area would be located on the Project site.

2.2.7.2 Construction Spoils and Debris

The Project would require the demolition of buildings and onsite features and the import of new fill to elevate the site. The Project would generate 3,390-cubic-yards of building debris that requires off-hauling, approximately 60%of which would be recycled; the remaining debris would be disposed of at a permitted landfill. The project would require the delivery of approximately 16,365-cubic-yards of new fill to elevate the site to comply with Burlingame's sea level rise requirements (Municipal Code Chapter 25.12.050).

2.2.7.3 Construction Schedule, Personnel, and Phasing

The Project would be constructed in 9 phases over 24 months, as highlighted in Table 1. To meet this schedule, it is possible for phases 4 and 5 to overlap with each other, as well for phases 6, 7, 8, and 9 to have staggered, overlapping periods. Construction is expected to commence in fall of 2024.

Table 1. Construction Stages, Timing, and Employment

Action/ Phase	Number of Workdays	Number of Employees
1. Demolition of Existing 801 Mahler Structure	30	10–15
2. Demolition of Existing 825 Mahler Structure	25	10–15
3. Site Preparation and Grading	60	20–25
4. Pipe Installation	34	30–45
5. Foundations	75	75–100
6. Building Exterior	210	75–100
7. Building Interior	320	125–150
8. Parking Structure Pour Sequence	160	50–75
9. Site Finishes	160	25–25

The typical construction workday would be from Monday through Saturday from 7:00 a.m. to 3:30 p.m., with some construction taking place until 7:00 p.m. Monday through Fridays or 6:00 p.m. on Saturdays, as needed. In general, most construction would comply with the applicable time-of-day restrictions for construction in the I/I district of the city, with the exception of some days when construction would start earlier than the hours prescribed in the Municipal Code (i.e., a 7:00 a.m. start time on Saturdays instead of the specified 9:00 a.m. start time for Saturdays in the Municipal Code). In addition, limited concrete pour activities may need to commence prior to 7:00 a.m., with an estimated up to 20 individual instances of approximately 6:00 a.m. early start days for large concrete pours over the 10 months of building exterior and parking structure pour sequence phases. The Project applicant would request prior approval from the City to work within the daytime hours they have identified above (e.g., beginning at 7:00 a.m. instead of 9:00 a.m. on Saturdays). Construction would only occur outside of the aforementioned allowable hours if the request is approved by the City.

2.2.8 Operational and Maintenance Activities

It is estimated that the office/R&D building would generate 756 employees between the office, R&D, and café uses. Per Burlingame Zoning Ordinance (Municipal Code Chapter 25.36.050), the building owner would maintain, in good condition, all landscape irrigation, walls, cribbing, drainage structures, planting slopes, and other protective devices.

2.2.9 Sustainability Features

The building will be all electric and achieve LEED Gold certification. Photovoltaic panels will be provided in an as-yet determined amount. As addressed above, to reduce stormwater flows, all stormwater would be treated, in accordance with LID treatment measures and mechanical treatment. The Project would comply with the City's reach code and exceed CALGreen Tier 2 EV requirements by providing 192 Level 2 EV Capable parking spaces and 128 EV charging stations (EVCS)[5] with Level 2 EV Ready spaces.

5 Per the City's Reach Code, *EVCS* refers to a parking space that includes installation of electric vehicle supply equipment (EVSE) at an EV Ready space.

Chapter 3
Environmental Checklist

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a "Potentially Significant Impact"), as indicated by the checklist on the following pages.

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

Determination

On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to 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 an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Catherine Keylon — Signature

January 10, 2024 — Date

Catherine Keylon — Printed Name

City of Burlingame — For

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained if it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less than Significant with Mitigation Incorporated" applies when the incorporation of mitigation measures has reduced an effect from a "Potentially Significant Impact" to a "Less-than-Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level. (Mitigation measures from *Earlier Analyses*, as described in #5 below, may be cross-referenced.)
5. Earlier analyses may be used if, pursuant to tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where earlier analyses are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, when appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to a less-than-significant level.

I. Aesthetics

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:					
a.	Have a substantial adverse effect on a scenic vista?			X	
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?				X
c.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d.	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?			X	

Setting

The city of Burlingame is in San Mateo County, east of the Santa Cruz Mountains and west of the San Francisco Bay (Bay). Burlingame is surrounded by the city of Millbrae to the northwest, the Bay to the east, the city of San Mateo to the southeast, and the town of Hillsborough to the southwest. Most of the City is located in a gently sloping valley in a highly developed urban/suburban area. The western portions of the City are in the foothills of the Santa Cruz Mountains, which offer scenic views of the the Bay and the East Bay Hills.

The Project site is in the northeast region of the City and within approximately 100 feet of the Bay. The visual and urban character within the relatively flat Bayfront area is influenced by the visually attractive landscape along the Bay and the mix of human-made elements, including retail, commercial, industrial, office, educational, and recreational uses. East of the Project site, across Old Bayshore Highway, is the Shorebird Sanctuary, a segment of the Bay Trail and the Bay Landing Hotel. South of and adjacent to the Project site is Mills Creek. Immediately adjacent to Mills Creek, utility poles and wires run along the southern perimeter of the Project site. Further south beyond the creek are additional innovation and industrial uses, including a single-story industrial building. Single-story commercial buildings and two schools are north of the Project site, along Mahler Road and Hinckley Road. To the west are additional innovation and industrial uses and US 101.

The Shorebird Sanctuary is at the mouth of Mills Creek and adjacent to a restaurant. The Shorebird Sanctuary provides habitat for 10 to 15 species of migratory birds,[6] and it also affords panoramic views of the Bay, the East Bay Hills, and SFO. A portion of the Bay Trail runs through the Shorebird Sanctuary. The Bay Trail, on the perimeter of San Francisco and San Pablo Bays, is a series of existing and planned regional hiking and bicycle trails that will eventually connect. This segment of the Bay Trail includes a paved path with benches, trash receptacles, signage, and landscaping. A bridge for bicycle and pedestrian use spans the mouth of Mills Creek.

The Project site is on two flat, urbanized parcels with one two-story office building and one single-story warehouse building. There is minimal landscape vegetation on each parcel. Eleven ornamental trees are scattered throughout the site. The Project site also includes surface parking. Access to the site parcels is currently provided by four driveways on Mahler Road.

Figure 9 provides photos of existing conditions at the Project site.

6 City of Burlingame. 2022. *Parks & Amenities*. Available: https://www.burlingame.org/parksandrec/facilities/parks_and_playgrounds/index.php. Accessed: August 29, 2023.

A. Project Site, Facing North


B. Project Site, Facing West


C. View of Project Site and Mills Creek, Facing West


D. View from Project Site, Facing East (Toward Bay)

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Figure 9
Existing Project Site Conditions
1499 Old Bayshore Highway

Discussion

a. Have a substantial adverse effect on a scenic vista?

According to the Healthy People and Healthy Places Element, Policy HP7.7, of the 2040 General Plan, the City would like to protect views of the Bay shoreline/Bayfront by identifying viewsheds to the Bay from key locations and restricting the height of buildings within these viewsheds to ensure that new Bayfront development does not detract from the scenic qualities of the area.[7]

In addition, views of the Santa Cruz Mountains and Skyline Ridge (collectively referred to as "the hillsides") are visible from the vicinity of the Project site when facing west on the Bay Trail. However, currently, both the Bay shoreline and the hillsides are viewed mainly through channelized view corridors, between the buildings and vegetation that front Old Bayshore Highway. The Project's proposed office/R&D building and parking structure would partially block views of the hillsides, as seen from the Bay Trail and the Shorebird Sanctuary, because of the increase in height, bulk, and massing. However, the size and scale of existing hotels and commercial uses in the Bayfront area are similar to the size and scale of the Project's proposed structures (ranging from four to ten stories). The new height and bulk associated with the Project would not contribute to significant additional blockage of views to the Bay shoreline or the hillsides. In addition, while height and massing would increase, the Project includes extending the Bay Trail approximately 400 feet for public use. Therefore, not only would the Project affect a small part of the overall view available from the Bay Trail or to the Bayfront, but some views could improve as a result of the Project.

The higher elevations of Burlingame provide vistas of the City, the Bay, and the East Bay Hills when looking east. The heights of the proposed buildings would not substantially affect these vistas because of the distance between the viewers and the Project site, the superior position of the viewers (i.e., at a higher elevation) relative to the Project site, the built-out urban nature of the City, and the vast expanse of the Bay views. The proposed structures would be a minor element of the views from higher elevations in the City and would not impede views of the Bay as seen from the hillsides. Therefore, the Project would have a ***less-than-significant*** impact on scenic vistas.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?

The Project site is not adjacent to or in view of a designated state scenic highway or corridor. The closest designated scenic highway is Interstate (I) 280,[8] which is approximately 2.5 miles to the west. The Project site cannot be seen from any portion of I-280. Therefore, there would be ***no impacts*** related to scenic resources within a state scenic highway corridor.

7 City of Burlingame 2019. *City of Burlingame General Plan*. Healthy People and Healthy Places. Final. November. Pg. HP-26.

8 California Department of Transportation. 2023. *Scenic Highways*. Available: Scenic Highways | Caltrans. Accessed: October 26, 2023.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

While the Project is in close proximity to non-urbanized areas, the Project itself is located in an urbanized area. For the purposes of this analysis, a conflict with zoning or other regulations governing scenic quality would result in a significant impact.

The Project site is developed with one office building, a warehouse, surface parking areas, and minimal landscaping. The Project site is close to the Bay and Shorebird Sanctuary; however, it is separated from the Bay and the Shorebird Sanctuary by Old Bayshore Highway and existing development. While the Project site is near Mills Creek, and the upper reaches of Mills Creek are considered a visual amenity in the 2040 General Plan, Open Space Element, the lower reaches near the Project site are not considered a visual amenity due to the developed nature of the surroundings and the utility poles and wires that run parallel to the creek. Therefore, the Project would not conflict with the 2040 General Plan's intention to protect visual amenities in the area.

With implementation of the Project, the two existing buildings would be demolished and the two parcels merged, then an eight-story, 148-feet-tall office/R&D building (approximately 314,921 gsf) and an adjacent seven-story, 78-feet-tall parking structure (approximately 208,423 gsf) would be built. The exterior of the building would be composed of glass and metal panels. The parking structure would be constructed with a concrete moment frame with concrete beams and columns that are open allowing a view into each parking level. The structure would include details and accents with perforated metal screens and a metal canopy at the entrance. The Project would result in a substantial increase in building mass and height, which would alter the visual character of the area and be visible from adjacent streets. However, this change in visual character has been encouraged by the City through policies and design guidelines in the Municipal Code Chapter 25:12, as described in Chapter 2, *Project Description*, and , therefore, does not conflict with any zoning or regulations.

During Project construction, a total of 11 trees, including 4 protected trees, would be removed. However, the Project would increase the amount of landscaped area, compared with current conditions, by providing a total of 35 trees throughout the Project site and nearby streetscapes in areas that would be accessed by tenants and the public. Approximately 27.4% of the Project site would be covered in landscaping, exceeding the 20% requirement stipulated in Municipal Code Chapter 25.36.040.

Consistent with Municipal Code Chapter 25.12.060, the City Planning Commission would ensure specific design principles for the Bayfront commercial zoning district are met, including protecting view corridors and supporting the shoreline. In particular, the proposed architecture and landscaping would be reviewed for compatibility with respect to the materials used in existing development, the location and use of plant materials, and the transitions where changes in land use would occur. The Project would comply with the City's design review process and landscaping standards to ensure that it would be visually compatible with the character of the surrounding area. Therefore, the Project would not conflict with applicable zoning and other regulations governing scenic quality, and the impact would be ***less than significant***.

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

The Project site is currently developed and urbanized. Streetlights, exterior commercial lighting, and vehicular lights exist in the surrounding area and along adjacent corridors, particularly Old Bayshore Highway and US 101. The new buildings would contribute additional sources of light; however, exterior lighting would be designed and installed to comply with existing regulations to reduce light pollution. The exterior lighting fixtures for the Project would be required to comply with the California Building Standards Code (Title 24, Building Energy Efficiency Standards), which requires new lighting fixtures to reduce the lateral spreading of light to surrounding uses. This is consistent with Municipal Code Chapter 18.16.030, which requires all new exterior lighting for commercial developments to be designed and located so that the cone of light and/or glare from the light element is kept entirely on the property or below the top of any fence, edge, or wall. In general, the light footprint would not extend beyond the periphery of each property. Exterior lighting for the Project would be limited to landscape, safety, and circulation lighting. To reduce substantial light and glare and create a bird-safe building, the exterior glazing would be 45% opaque, external lighting would be minimized and shielded, and portions of Levels 1 and 2 of the office/R&D building would be recessed from the upper floors.

Glass surfaces on the proposed structures would increase reflected sunlight, ambient light, and glare compared with existing conditions. However, the new exterior lighting for the Project would be designed to minimize light and glare, per existing regulations and to provide bird safety. Thus, impacts due to light and glare would be ***less than significant***. For an analysis of impacts on birds from Project light and glare sources, see Section IV, *Biological Resources*, *Impacts on Animals due to Increased Lighting*.

II. Agricultural and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				X
c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				X

Setting

The Project site is fully developed with two office buildings and a surface parking lot. The U.S. Department of Agriculture, Natural Resources Conservation Service, soil map identifies the Project as Urban Land.[9] The California Department of Conservation 2018 map of Important Farmland identifies the city of Burlingame, including the Project site, as Urban and Built-Up Land.[10]

Discussion

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The Project site and all surrounding lands are identified as Urban and Built-Up Land by the California Department of Conservation. No important farmland, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, exists within or adjacent to the Project site. There is, therefore, no potential for the Project to result in the conversion of important farmland to non-agricultural uses, and there would be ***no impact***.

b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?

The Project site is in the I/I zone, which only allows permitted urban agricultural land uses. Accordingly, no agricultural land, including agricultural land under a Williamson Act or Farmland Security Zone contract, currently exists at the Project site.[11] Therefore, the Project would not result in a conflict with existing zoning for agricultural use or a Williamson Act contract, and there would be ***no impact***.

c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

The site is not zoned for forestland, timberland, or timberland production.[12] Therefore, the Project would not conflict with zoning for such land, and accordingly, there would be ***no impact***.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

There is no forestland within the Project site.[13] Therefore, the Project would not convert such land to an alternative use, and there would be ***no impact***.

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9 U.S. Department of Agriculture. 2018. *Web Soil Survey.* Natural Resources Conservation Service Available: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed: December 12, 2023.

10 California Department of Conservation. 2019. *San Mateo County Important Farmland 2018*. Division of Land Resource Protection: Farmland Mapping and Monitoring Program. Available: https://www.conservation.ca.gov/dlrp/fmmp/Pages/SanMateo.aspx. Accessed: August 3, 2023.

11 City of Burlingame. 2021. *City of Burlingame Zoning Map*. Available: Land Use Look-Up Application (arcgis.com). Accessed: August 3, 2023.

12 ibid.

13 ibid.

e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

Other changes in the existing environment that, because of their location or nature, could result in the conversion of Farmland to non-agricultural use or the conversion of forestland to non-forest use could include actions that would affect livestock on Farmland of Local Importance or actions that would affect forest health. Because there is no livestock at the Project site, there would be no impact related to the conversion of Farmland to nonagricultural use. Because there is no forestland at the Project site, there would be ***no impact*** related to the conversion of Farmland or forestland to alternative uses.

III. Air Quality

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:					
a.	Conflict with or obstruct implementation of the applicable air quality plan?			X	
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?			X	
c.	Expose sensitive receptors to substantial pollutant concentrations?		X		
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Setting

The Project site is in the city of Burlingame in San Mateo County, which is within the San Francisco Bay Area Air Basin (SFBAAB). Concentrations of ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead, and particulate matter (PM10 [particulate matter no more than 10 microns in diameter] and PM2.5 [particulate matter no more than 2.5 microns in diameter]) are commonly used as indicators of ambient air quality conditions. These pollutants are known as criteria pollutants and regulated by the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) through national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS), respectively. The NAAQS and CAAQS limit criteria pollutant concentrations to protect human health and prevent environmental and property damage. Other pollutants of concern in the Project area are nitrogen oxides (NO_X) and reactive organic gases (ROGs), which are precursors to O_3, and toxic air contaminants (TACs), which can cause cancer and other human health concerns.

Ambient Criteria Pollutant Conditions and Regional Attainment Status

A number of ambient air quality monitoring stations are located in the SFBAAB to monitor progress toward air quality standards attainment of NAAQS and CAAQS. There are no monitoring stations in Burlingame, but there is one monitoring station 12 miles southeast in Redwood City at 897 Barron Avenue. However, PM10 is not measured at the Redwood City station; therefore, data from the next closest station that monitors PM10 (the San Francisco-Arkansas Street station) have been collected as well. Recent air quality monitoring results from these monitoring stations are summarized in Table 2. The data represents air quality monitoring for the last 3 years for which a complete dataset is available (2020–2022). As indicated in Table 2, the monitoring stations have experienced infrequent violations of state and federal air quality standards during this time period.

Table 2. Ambient Air Quality Monitoring Data from Redwood City Monitoring Station

Pollutant Standards	2020	2021	2022
Ozone (O_3)			
Maximum 1-hour concentration (ppm)	0.098	0.085	0.079
Maximum 8-hour concentration (ppm)	0.077	0.063	0.061
Number of days standard exceeded [b]			
CAAQS 1-hour (>0.09 ppm)	1	0	0
CAAQS 8-hour (>0.070 ppm)	1	0	0
NAAQS 8-hour (>0.075 ppm)	1	0	0
Carbon Monoxide (CO)			
Maximum 8-hour concentration (ppm)	1.5	0.9	1
Maximum 1-hour concentration (ppm)	2.1	1.6	1.8
Number of days standard exceeded [b]			
NAAQS 8-hour (>9 ppm)	0	0	0
CAAQS 8-hour (>9.0 ppm)	0	0	0
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1-hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
State maximum 1-hour concentration (ppb)	45	40	43
State second-highest 1-hour concentration (ppb)	44	39	43
Annual average concentration (ppb)	8	7	8
Number of days standard exceeded [b]			
CAAQS 1-hour (180 ppb)	0	0	0
Particulate Matter (PM10)[a]			
National maximum 24-hour concentration (µg/m^3)	102.3	32.2	34.2
National second-highest 24-hour concentration µg/m^3)	58.0	26.4	28.5
State maximum 24-hour concentration µg/m^3)	105.0	33.0	36.0
State second-highest 24-hour concentration µg/m^3)	59.0	27.0	30.0
National annual average concentration µg/m^3)	12.0	8.2	7.7
State annual average concentration (µg/m^3)	23.3	16.1	*
Number of days standard exceeded [b]			
NAAQS 24-hour (>150 µg/m^3)	0	0	0
CAAQS 24-hour (>50 µg/m^3)	2	0	0
Particulate Matter (PM2.5)			
National maximum 24-hour concentration (µg/m^3)	124.1	30.1	27.4
National second-highest 24-hour concentration (µg/m^3)	116.0	20.1	23.7
State maximum 24-hour concentration (µg/m^3)	124.1	30.1	27.4
State second-highest 24-hour concentration (µg/m^3)	116.0	20.1	23.7
National annual average concentration (µg/m^3)	9.8	6.0	6.8
State annual average concentration (µg/m^3)	9.8	6.1	6.8
Number of days standard exceeded [b]			
NAAQS 24-hour (>35 µg/m^3)	9	0	0

Sources:
CARB. 2023. *iADAM: Air Quality Data Statistics. Top 4 Summary*. Available: https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed: October 4, 2023.
EPA. 2023. *Monitor Values Report*. Available: https://www.epa.gov/outdoor-air-quality-data/monitor-values-report. Accessed: October 4, 2023.
Notes:
[a] Data for Particulate Matter (PM10) was unavailable from the Redwood City Monitoring Station or anywhere else in San Mateo County, so data is taken from the San Francisco-Arkansas Street Monitoring Station in San Francisco County.
[b] An exceedance is not necessarily a violation.
ppm = parts per million; ppb = parts per billion; NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; µg/m3 = micrograms per cubic meter; mg/m3 = milligrams per cubic meter; - = data not available; * = insufficient data available to determine the value.

Local monitoring data are used to designate areas as nonattainment, maintenance, attainment, or unclassified areas, according to the ambient air quality standards. San Mateo County is currently classified as a nonattainment area for the federal and state O_3 and PM2.5 standards and a nonattainment area for the state PM10 standard.[14, 15]

Existing TAC Sources and Health Risks

The Bay Area Air Quality Management District (BAAQMD) maintains an inventory of health risks associated with all permitted stationary sources within the SFBAAB that is available online.[16] Within 1,000 feet of the Project site, there is one permitted facility that has a background health risk associated with it. Aside from stationary sources, emissions of toxic air contaminants (TACs) around the Project site are also generated from mobile sources on roads and highways, including US 101 and Old Bayshore Highway. Health risks associated with the nearby permitted stationary source, highways, and surface streets, as well as railways, are considered in the analysis of the Project's cumulative health risks.

Sensitive Receptors

Sensitive land uses are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, including children and the elderly. Per BAAQMD,

> sensitive receptors include children, the elderly, off-site workers, students, and those with preexisting medical conditions. They are typically found in residences, schools, parks and playgrounds, daycare centers, nursing homes, and medical facilities, but some receptors are overlooked because they are found in an unlikely location…encampments for the unhoused,

14 CARB. 2023. *Maps of Current State and Federal Area Designations*. October. Available: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed: October 4, 2023.

15 EPA. 2023. *California Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants*. January 31. Available: https://www3.epa.gov/airquality/greenbook/anayo_ca.html. Accessed: October 4, 2023.

16 BAAQMD. 2020. *Stationary Source Screening Map*. Available: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3. Accessed: October 4, 2023.

warehouses with indoor sports facilities for children and youth, privately operated indoor playgrounds for young children, and privately operated youth-serving facilities.[17]

Land uses in the Project area include primarily commercial and industrial facilities.[18] Sensitive receptors in the Project area include off-site workers at the nearby commercial and industrial facilities, located as close as 50 feet from the Project site, and students at Avalon Academy, Burlingame Music School, and Peninsula High School, located as close as 65 feet from the Project site. The nearest residential uses are more than 2,000 feet from the Project site and thus are not in close proximity to the Project area.

Regulatory Setting

BAAQMD is responsible for ensuring that the NAAQS and CAAQS are met within the SFBAAB. BAAQMD manages air quality through a comprehensive program that includes long-term planning, regulations, incentives for technical innovation, education, and community outreach. BAAQMD's 2017 Clean Air Plan (*Spare the Air, Cool the Climate*) is the current air quality attainment plan for the SFBAAB and provides an integrated strategy to reduce O_3, particulate matter, TACs, and greenhouse gas (GHG) emissions in a manner that is consistent with federal and state air quality programs and regulations.

BAAQMD California Environmental Quality Act, Air Quality Guidelines

In April 2023, BAAQMD published the most recent version of its *California Environmental Quality Act, Air Quality Guidelines* (BAAQMD CEQA Guidelines). The BAAQMD CEQA Guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics and odors, as well as best practices for centering environmental justice, health, and equity.

As stated in Appendix G of the CEQA Guidelines, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make checklist determinations. Accordingly, BAAQMD's thresholds are used to evaluate the significance of air quality impacts associated with the Project.

Regional Criteria Pollutants and Precursors

BAAQMD's significance thresholds, as shown in Table 3, for criteria pollutants (ROGs, NO_X, PM10, and PM2.5) are based on the stationary-source emissions limits of the federal Clean Air Act (CAA) and BAAQMD Regulation 2, Rule 2. The federal New Source Review program, created by the federal CAA, set emissions limits to ensure that stationary sources of air pollution are constructed in a manner that is consistent with attainment of the NAAQS. Similarly, to ensure that new stationary sources do not cause or contribute to a violation of the NAAQS, BAAQMD Regulation 2, Rule 2, requires any new source that emits criteria air pollutants, above specified emissions limits, to offset

[17] BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

[18] City of Burlingame. n.d. *Land Use Look-Up Application*. Available: https://bgmaps.maps.arcgis.com/apps/webappviewer/index.html?id=dc6ddd4d57c54beabcb447d86362d791. Accessed: October 4, 2023.

those emissions. Although the emission limits are adopted in the regulation to control stationary-source emissions, the amount of the emission is the key determining factor, regardless of source, when addressing public health impacts of regional criteria pollutants. Therefore, the emissions limits are appropriate for the evaluation of land use development and construction activities, as well as stationary sources. Those projects that would result in emissions that would be below the thresholds would not be considered projects that would contribute to an existing or projected air quality violation or result in a considerable net increase in criteria pollutant emissions.

Note that the federal New Source Review emissions limits and BAAQMD's offset limits are identified in the regulation on an annual basis (in tons per year). For construction activities, the limits are converted to average daily emissions (in pounds per day), as shown in Table 3, because of the short-term and intermittent nature of construction activities. If emissions would not exceed average daily emissions limits, the Project would not exceed annual levels.

Table 3. BAAQMD Project-Level Regional Criteria Pollutant Emissions Thresholds

Analysis	Thresholds
Regional Criteria Pollutants (Construction)	• Reactive Organic Gases (ROG): 54 pounds/day • Nitrogen Oxides: 54 pounds/day • Particulate Matter (PM10): 82 pounds/day (exhaust only); compliance with best management practices (fugitive dust) • Fine Particulate Matter (PM2.5): 54 pounds/day (exhaust only); compliance with best management practices (fugitive dust)
Regional Criteria Pollutants (Operations)	• Reactive Organic Gases (ROG): Same as construction • Nitrogen Oxides (NO_X): Same as construction • Particulate Matter (PM10): 82 pounds/day • Fine Particulate Matter (PM2.5): 54 pounds/day

Source: BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

Health Effects of Regional Criteria Pollutants and Precursors

BAAQMD's CEQA Guidelines note that, to comply with the Friant Ranch decision,[19]

> lead agencies need to sufficiently explain the nature and magnitude of significant impacts identified by criteria air pollutant and precursor air quality analyses such that readers can meaningfully understand them. Moreover, lead agencies must make a reasonable effort to connect a project's emissions, where significant, to foreseeable health impacts or provide evidence as to why such an analysis is not scientifically possible.[20]

[19] The California Supreme Court's 2018 decision in *Sierra Club v. County of Fresno* (6 Cal.5th 502), also referred to as the Friant Ranch Decision, included review of the long-term regional air quality analysis contained in the EIR for the proposed Community Plan Update and Friant Ranch Specific Plan. The court found that the EIR's air quality analysis was inadequate because it failed to provide enough detail "for the public to translate the bare [criteria pollutant emissions] numbers provided into adverse health impacts or to understand why such a translation is not possible at this time."

[20] BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

Air districts develop region-specific CEQA thresholds of significance in consideration of existing air quality concentrations as well as attainment or nonattainment designations under the NAAQS and CAAQS. The NAAQS and CAAQS are informed by a wide range of scientific evidence that demonstrates that there are known safe concentrations of criteria pollutants. Although recognizing that air quality is a cumulative problem, air districts typically consider projects that generate criteria pollutant and O_3 precursor emissions that are below the thresholds to be minor in nature. Such projects would not adversely affect air quality or exceed the NAAQS or CAAQS. For projects generating emissions that exceed the mass emissions thresholds, BAAQMD recommends tying the project emissions to potential negative health consequences if scientifically feasible.

Carbon Monoxide

Heavy traffic congestion can contribute to high levels of CO. Individuals exposed to such "hot spots" may have a greater likelihood of developing adverse health effects. BAAQMD has adopted screening criteria that provide a conservative indication of whether Project-generated traffic would cause a potential CO hot spot. If the screening criteria are not met, a quantitative analysis, through site-specific dispersion modeling of Project-related CO concentrations, would not be necessary. A project would not cause localized violations of the CAAQS for CO if the following BAAQMD CO screening criteria are met.[21]

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans.
- Project-generated traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- Project-generated traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Local Risks and Hazards

Particulate Matter

BAAQMD adopted an incremental PM2.5 concentration-based significance threshold in which a "substantial" contribution at the project level for an individual source is defined as total (i.e., exhaust and fugitive) PM2.5 concentrations exceeding 0.3 micrograms per cubic meter ($\mu g/m^3$). In addition, BAAQMD considers projects to have a cumulatively considerable PM2.5 impact if sensitive receptors are exposed to PM2.5 concentrations from local sources within 1,000 feet, including existing sources, project-related sources, and reasonably foreseeable future sources, that exceed 0.8 $\mu g/m^3$.[22]

BAAQMD has not established PM10 thresholds of significance. BAAQMD's PM2.5 thresholds apply to both new receptors and new sources. However, BAAQMD considers impacts related to fugitive PM10 from earthmoving activities to be less than significant with application of BAAQMD's basic construction measures.

21 ibid.

22 ibid.

Toxic Air Contaminants

BAAQMD has adopted incremental cancer and hazard thresholds to evaluate receptor exposure to single sources of TAC emissions. The "substantial" TAC threshold defined by BAAQMD is exposure of a sensitive receptor to an individual emissions source, resulting in an excess cancer risk level of more than 10 in 1 million or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0.[23] BAAQMD also considers projects to have a cumulatively considerable TAC impact if they contribute to TAC emissions that, when combined with cumulative sources within 1,000 feet of sensitive receptors, result in excess cancer risk levels of more than 100 in 1 million or a hazard index greater than 10.0.[24]

Asbestos

BAAQMD's CEQA Guidelines state that projects that have the potential to disturb asbestos (from soil or building material) must comply with all the requirements of CARB's Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations and BAAQMD Regulation 11, Rule 2: Asbestos Demolition, Renovation and Manufacturing.[25] CARB's ATCM for Construction, Grading, Quarrying, and Surface Mining Operations requires work practices that minimize asbestos emissions from activities where naturally occurring asbestos is found or is likely to be found. BAAQMD Regulation 11, Rule 2, controls emissions of asbestos to the atmosphere during demolition, renovation, and transportation. The rule requires lead agencies and their contractors to notify BAAQMD of any regulated renovation or demolition activity and provide a description of structures and methods utilized to determine whether asbestos-containing materials are potentially present. In addition, Regulation 11, Rule 2, requires any asbestos-containing material found on a site to be removed prior to demolition or renovation, thereby minimizing the release of airborne asbestos emissions. Thus, projects that comply with the requirements of CARB's ATCM for Construction, Grading, Quarrying, and Surface Mining Operations and BAAQMD Regulation 11, Rule 2 would not have a significant air quality impact with respect to asbestos emissions.

Odors

According to BAAQMD's CEQA Guidelines, odor impacts could occur if a project proposes a new odor source near existing receptors.[26] BAAQMD recommends that projects identify the location of planned odor sources and include policies to reduce potential odor impacts on existing receptors and provides recommended screening distances for siting new receptors near existing odor sources.

Air Pollution and Health and Equity Regulation

California has advanced several policies and regulations to address and center health and equity as part of public planning. Many of these regulations have a nexus with air quality. Senate Bill (SB) 535 recognizes that environmental pollution has had a disproportionate effect on disadvantaged communities, and requires these areas be prioritized for emission reduction projects funded by California's cap-and-trade program. Assembly Bill (AB) 1550 expanded funding prioritization from cap-and-trade proceeds to include low-income communities. AB 617 requires the state to monitor and report criteria pollutant and TAC emissions for certain stationary sources. The bill also requires

23 ibid.

24 ibid.

25 ibid.

26 ibid.

development of a statewide plan to reduce these emissions in communities that experience a high cumulative exposure burden. In response to AB 617, CARB developed the Community Air Protection Program (CAPP), which includes air monitoring and emissions reductions programs, initially focused on ten designated communities throughout California.

Environmental Burdens

OEHHA maintains the California Communities Environmental Health Screening Tool (CalEnviroScreen), which provides relative rankings of census tracts based on 21 environmental, health, demographic, and socioeconomic indicators (e.g., ozone concentrations, groundwater threats, education levels). Ranking scores are provided for each indicator, which are also combined to provide an overall ranking score for the census tract. The scores are not a measure of health risk; rather, they reflect the relative pollution burden and vulnerabilities in one census tract compared to other census tracts in the state. Scores are given on a scale of 0 to 100, with larger numbers representing areas with relatively high existing pollution burdens and population sensitivities.

Disadvantaged communities are defined as the census tracts ranking in the top 25th percentile for environmental burdens and socioeconomic conditions (i.e., CalEnviroScreen score of 75 or higher). Low-income communities are defined as the census tracts that are either at or below 80 percent of the statewide median income, or at or below the threshold designated as low-income by the California Department of Housing and Community Development's state income limits.

The Project is located within census tract 608605100, which has a CalEnviroScreen percentile score of 43. This score indicates that the census tract experiences more minor pollution and secondary effects than the rest of the state. As the census tract has a CalEnviroScreen percentile score lower than 70%, it is not considered an overburdened community per BAAQMD guidance.

Discussion

a. Conflict with or obstruct implementation of the applicable air quality plan?

As described under *Regulatory Setting*, the current air quality attainment plan for the SFBAAB is BAAQMD's 2017 Clean Air Plan, which defines control strategies to reduce emissions and ambient concentrations of air pollutants; safeguards public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduces GHG emissions to protect the climate.[27] According to the BAAQMD CEQA Guidelines, the determination of 2017 Clean Air Plan consistency should consider the following for project-level analyses.[28]

1. Does the project support the primary goals of the 2017 Clean Air Plan?

The Project includes numerous improvements that will support regional attainment of the CAAQS and NAAQS. Specifically, the Project would redevelop the existing uses with all-electric office/R&D buildings, resulting in lower emissions than if the Project were to use energy

[27] BAAQMD. 2017. *Final 2017 Clean Air Plan*. Adopted April 19. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed: October 4, 2023.

[28] BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

generated by fossil fuel energy sources, consistent with the goals of the 2017 Clean Air Plan. To support efforts to reduce emissions for transportation, transportation demand management (TDM) measures would be implemented as a part of the Project that would support travel by sustainable modes and reduce the number of single-occupant vehicle trips generated by the Project. In addition, the Project encourages the use of EVs and facilitating the transition away from internal combustion vehicles by providing electric vehicle (EV) parking. Finally, the Project would be designed to achieve LEED Gold certification and include on-site solar power generation. The Project would thus support the primary goals of the 2017 Clean Air Plan.

2. Does the project include all applicable control measures from the 2017 Clean Air Plan?

The Project's consistency with the measures is discussed below for each emissions sector.

Stationary Sources: The Project would include four diesel-powered emergency generators, which would require a permit from BAAQMD to operate. As part of the permit review process, operation of the emergency generators would be required to comply with BAAQMD permitting requirements, which incorporate stationary-source control measures from the 2017 Clean Air Plan; therefore, the Project would be consistent with the stationary-source control measures of the 2017 Clean Air Plan through compliance with the current regulatory process.

Transportation: The 2017 Clean Air Plan recognizes that community design dictates individual travel mode and that a key long-term control strategy to reduce emissions of criteria pollutants, TACs, and GHGs 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.

The Project would provide 129 EV parking stalls, approximately 21% of the provided parking spaces, thus supporting 2017 Clean Air Plan efforts to electrify motor vehicles. In addition, as mentioned previously, TDM measures would be implemented as a part of the Project that would support travel by sustainable modes and reduce the number of Project-generated single-occupant vehicle trips.

Energy: The energy-related measures generally apply to electrical utility providers and local government agencies, and not individual projects. The Project would nonetheless support efforts to switch to less GHG-intensive fuel sources and minimize electricity consumption through energy-efficient design. Specifically, the Project would redevelop the existing uses with all-electric office/R&D buildings and include onsite solar power generation, thereby reducing reliance on natural gas and increasing reliance on renewable energy. In addition, the Project would be designed to achieve LEED Gold certification, which includes energy efficiency and conservation requirements.

Buildings: The control measures for this sector focus on working with local governments that have authority over local building codes to facilitate adoption of best management practices and policies related to GHGs. As such, the building control measures of the Clean Air Plan are not applicable to the Project. The Project would nonetheless support efforts to reduce emissions from buildings by redeveloping the existing uses with all-electric office/R&D buildings, including onsite solar power generation, providing EV parking, and achieving LEED Gold certification.

Waste Management: The Project would be designed to achieve LEED Gold certification, which includes waste reduction and diversion requirements. Moreover, the Project would comply with

the City's Construction and Demolition Recycling Ordinance, incorporated as Chapter 18.17 of the Municipal Code. In line with these requirements, approximately 60% of building debris generated during demolition would be recycled, as described in Chapter 2, *Introduction/Project Description*.

Water: The water control measures apply to publicly owned treatment works and local government agencies, and not individual projects. Nevertheless, the Project would be designed to achieve LEED Gold certification, which includes water conservation requirements. Moreover, the Project would comply with the City's water conservation in landscaping and indoor water conservation policies, incorporated as Chapters 18.17 and 18.19 of the Municipal Code, respectively.

Agriculture and Natural and Working Lands: The agriculture control measures are designed to reduce emissions of methane, and the natural and working lands control measures focus on increasing carbon sequestration on rangelands and wetlands. Because the Project would not include any agricultural activities and would not directly disturb rangelands or wetlands, the measures from these categories are not applicable to the Project.

3. Does the project disrupt or hinder implementation of any 2017 Clean Air Plan control measures?

The Project would incorporate a variety of sustainable design features to reduce air pollutant emissions associated with transportation, energy, *buildings*, waste generation, and water usage. As a result, the Project would not disrupt, delay, or otherwise hinder implementation of any applicable control measure from the 2017 Clean Air Plan. Rather, the Project would support and facilitate implementation.

For these reasons, the Project would not fundamentally conflict with the 2017 Clean Air Plan. This impact would be ***less than significant***.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?

Regional Criteria Pollutant and Precursor Emissions

Construction

Construction of the Project would generate ROG, NO_X, PM10, and PM2.5 emissions that could result in short-term air quality effects. Construction would start in 2024 and be completed by 2026 and is expected to consist of demolition, site preparation/grading, pile installation, foundations, building exterior, building interior, parking structure pour sequence, and site finishes. Construction is expected to occur 6 days per week, Monday through Saturday. Emissions would be released in the form of exhaust from off-road equipment, employee vehicles, vendor trucks, and haul trucks; fugitive dust from site grading and earthmoving; suspended road dust from vehicle travel; and off-gassing from architectural coatings and paving.

Short-term emissions generated by Project construction were calculated using CalEEMod Version 2022.1, which uses vehicle emission factors from CARB's EMFAC2021, as recommended by

BAAQMD and other air districts in California.[29] Modeling was based on default values from CalEEMod, which are generated by the model based on a project's location and land use type, and Project-specific information where available, including building types and sizes, expected construction phase durations, an equipment inventory, demolition and earthwork quantities, the number and length of employee, vendor, and haul truck trips, and the area to be graded or paved.

The quantity of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring simultaneously. Consistent with BAAQMD guidance, average daily emissions have been calculated to assess construction impacts.[30] The average daily criteria air pollutant emissions that would be generated during Project construction are shown in Table 4. Detailed model assumptions and inputs for the calculations can be found in Appendix A.

Table 4. Average Daily Criteria Pollutant Emissions from Project Construction (pounds per day)

Construction Year	ROG	NO_X	PM10 Exhaust	PM2.5 Exhaust
2024	1	10	1	1
2025	2	17	1	1
2026	16	21	1	1
BAAQMD threshold	54	54	82	54
Exceeds threshold?	No	No	No	No

Source: Appendix A.
ROG = reactive organic gas; NO_X = nitrogen oxides; PM10 = particulate matter 10 microns or less in diameter; PM2.5 = particulate matter 2.5 microns or less in diameter.
Notes: Emissions are rounded to the nearest whole number, and exceedances are underlined.

As shown in Table 4, construction of the Project would not generate ROG, NO_X, PM10 exhaust, or PM2.5 exhaust emissions in excess of BAAQMD's numeric thresholds. Project construction would thus not contribute a significant level of air pollution that would degrade regional air quality within the SFBAAB. As a result, this impact would be ***less than significant***.

Fugitive Dust

Project construction activities would also generate fugitive dust emissions (i.e., PM2.5 and PM10). As noted in BAAQMD's CEQA Guidelines, projects implementing the BAAQMD-recommended basic best management practices for construction-related fugitive dust emissions are considered to have a less-than-significant criteria air pollutant impact related to construction-generated fugitive dust emissions.[31] As such, with the inclusion of **Mitigation Measure AQ-1**, which requires the implementation of BAAQMD-identified best management practices (BMPs), the Project's construction-generated fugitive dust emissions would not contribute a significant level of air pollution that would degrade regional air quality within the SFBAAB. This impact would be ***less than significant with mitigation***.

29 CAPCOA. 2022. *California Emissions Estimator Model User Guide*. April. Available: https://caleemod.com/documents/user-guide/CalEEMod_User_Guide_v2022.1.pdf. Accessed: October 4, 2023.

30 BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

31 ibid.

Mitigation Measure AQ-1: Require Implementation of BAAQMD Basic Best Management Practices for Construction-Related Fugitive Dust Emissions.

The Project applicant shall require their contractors, as a condition of contracts (e.g., standard specifications), to reduce construction-related fugitive dust emissions by implementing BAAQMD's basic best management practices, including the following measures.

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt trackout 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.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
- Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

The Project applicant shall submit evidence of compliance to the City prior to grading permit issuance.

Operation

The Project would be fully operational by 2026. Project operation would generate emissions of ROG, NO_X, PM10, and PM2.5 that could result in long-term air quality effects during the operations period. Long-term air pollutant emissions would result from motor vehicles traveling to and from the Project site; operation of landscape maintenance equipment, the proposed lab uses, and the proposed four 903 horsepower diesel-fueled emergency generators; the use of cleaning supplies; and the periodic reapplication of architectural coatings. The Project would not result in any direct building energy emissions of criteria pollutants, as no natural gas infrastructure would be constructed.

Emissions associated with the proposed laboratory uses were quantified external to CalEEMod, based on TAC emission rates derived from the U.C. Davis Health Risk Assessment (HRA).[32, 33] These emissions rates, calculated in pounds per hour per square foot, were then multiplied by the proposed laboratory building square footage of 188,953 square feet. This analysis conservatively assumes that lab activities would occur approximately 12 hours per day, 5 days per week, 260 days per year.

Emissions from all other sources were calculated using CalEEMod Version 2022.1, as recommended by BAAQMD and other air districts in California.[34] Modeling was based on Project-specific information where available, including land use categories and sizes, trip generation estimates, and stationary equipment data; and default values from CalEEMod, which are generated by the model based on a project's location and land use type. To estimate emissions from the four proposed emergency generators, this analysis assumes 110 hours of operation per year to account for testing, maintenance, and emergency use and relies on the CalEEMod default emission factors, which align with BAAQMD,[35] CARB,[36] and EPA guidance (Federal Register 39172, 4660).

Table 5 shows the Project's estimated average daily operational emissions, which are compared to the applicable BAAQMD thresholds. Detailed model assumptions and inputs for the calculations can be found in Appendix A.

Table 5. Average Daily Operational Criteria Pollutant Emissions (pounds per day)

Source	ROG	NO_X	PM10	PM2.5
Mobile sources	5	6	19	5
Area sources	9	<1	<1	<1
Energy sources	-	-	-	-
Stationary sources	2	8	<1	<1
Laboratory sources	18	-	-	-
Total Project	**34.7**	**13.8**	**19.4**	**5.2**
BAAQMD threshold	54	54	82	82
Exceeds threshold?	No	No	No	No

Source: Appendix A.
ROG = reactive organic gas; NOx = nitrogen oxides; PM10 = particulate matter 10 microns or less in diameter; PM2.5 = particulate matter 2.5 microns or less in diameter.
Notes: Emissions are rounded to the nearest whole number.

32 Yorke Engineering. 2018. *Health Risk Assessment for the University of California, Davis 2017 Long Range Development Plan*. January. Available: https://ucdavis.app.box.com/s/uc2zwm2hmfgou618dme9wt04bqkal6qk. Accessed: October 4, 2023.

33 It was conservatively modeled that 100% of these TAC emissions would also be ROG emissions.

34 CAPCOA. 2022. *California Emissions Estimator Model User Guide*. April. Available: https://caleemod.com/documents/user-guide/CalEEMod_User_Guide_v2022.1.pdf. Accessed: October 4, 2023.

35 BAAQMD. 2009. *Best Available Control Technology (BACT) Guideline: IC Engine – Compression Ignition, Stationary Prime; non-Agricultural*. Available: https://www.baaqmd.gov/~/media/files/engineering/bact-tbact-workshop/combustion/96-1-4.pdf?la=en. Accessed: October 4, 2023.

36 CARB. 2011. *Final Regulation Order: Amendments to the Airborne Toxic Control Measure for Stationary Compression Ignition Engines*. Available: https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/finalreg2011.pdf. Accessed: October 4, 2023.

As shown in Table 5, Project operation would not generate ROG, NO_X, PM10, or PM2.5 emissions in excess of BAAQMD's numeric thresholds. Project operation would thus not contribute to a significant level of air pollution that would degrade regional air quality within the SFBAAB. As a result, this impact would be ***less than significant***.

Health Effects of Regional Criteria Pollutant and Precursor Emissions

As discussed above, BAAQMD's regional thresholds consider existing air quality concentrations and attainment or nonattainment designations under the NAAQS and CAAQS. The NAAQS and CAAQS are informed by a wide range of scientific evidence that demonstrates there are known safe concentrations of criteria pollutants. Although BAAQMD recognizes that air quality is a cumulative problem, it considers projects that generate criteria pollutant and O_3 precursor emissions that fall below the thresholds to be minor in nature; therefore, such projects would not adversely affect air quality to the extent that the health-protective NAAQS or CAAQS would be exceeded.

As shown in Table 4 and Table 5, Project construction and operation would not generate regional criteria pollutants in excess of the applicable BAAQMD thresholds. As such, the Project would not be expected to contribute a significant level of air pollution that would degrade air quality within the SFBAAB. As a result, this impact would be ***less than significant***.

Localized Carbon Monoxide Emissions

CO hot spots are typically observed at heavily congested intersections where a substantial number of gasoline-powered vehicles idle for prolonged durations. Peak-hour traffic volumes at all roadways in the vicinity were analyzed to determine whether CO emitted by Project-generated traffic would exceed the BAAQMD screening criteria. Based on the volume summaries provided in the Transportation Impact Analysis (TIA) report, maximum traffic volumes at the affected intersections would be less than BAAQMD's recommended screening criterion of 44,000 vehicles per hour, as well as the screening criterion of 24,000 vehicles per hour that BAAQMD recommends for areas where vertical and/or horizontal mixing is substantially limited.

Based on information provided by Kittelson & Associates, the Project would be consistent with the applicable congestion management program by developing land use types and sizes consistent with the ENVISION Burlingame General Plan land use designation for the site. As the Project is consistent with the applicable congestion management program, BAAQMD's screening criteria are used to evaluate the Project's impact with respect to local CO hot spots. As described in the TIA, all studied intersections would operate to the City's standards when accounting for increases in traffic volumes resulting from the Project. As a result, the Project would not exceed BAAQMD's screening criteria for local CO hot spots, and the Project can be assumed not to result in, or contribute to, a localized concentration of CO that would exceed the applicable NAAQS or CAAQS. As a result, this impact would be ***less than significant***.

c. Expose sensitive receptors to substantial pollutant concentrations?

Project construction activities and operation would generate TAC emissions, including diesel particulate matter (DPM), PM2.5, and ROG from the proposed lab uses. Because the Project would introduce TAC emissions in an area near existing sensitive receptors, an HRA was conducted in accordance with BAAQMD guidelines. The HRA uses EPA's most recent air dispersion model, AERMOD (version 22112); cancer and chronic risk assessment values for DPM provided by the California Office of Environmental Health and Hazard Assessment (OEHHA); model inputs

recommended in BAAQMD's CEQA Guidelines, Appendix E: *Recommended Methods for Screening and Modeling Local Risks and Hazards*; and other assumptions from South Coast Air Quality Management District (SCAQMD).[37, 38, 39, 40] The HRA applies the most recent guidance and calculation methods from OEHHA's Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments.[41] The HRA consists of three parts: an emissions inventory, air dispersion modeling, and risk calculations.

The construction emissions inventory includes PM10 exhaust emissions (representative of DPM) from offroad equipment, onsite trucks, and on-road trucks and PM2.5 dust emissions from onsite soil movement and the travel of trucks and construction worker vehicles on roadways. The operational emissions inventory includes PM10 exhaust (representative of DPM) and PM2.5 emissions from four emergency generators, PM2.5 emissions from vehicle traveling to and from the Project site, and ROG emissions from the lab space. This analysis also includes the potential acute risk from the different TACs that would be emitted from the laboratory uses.

For the air dispersion modeling component, the HRA used AERMOD to model annual average emissions concentrations at existing sensitive receptors. The Project site is located closest to the San Francisco International Airport (KSFO) BAAQMD monitoring station, and thus meteorological data from KSFO air monitoring station for 2013 to 2017 were used to model pollutant concentrations at existing, offsite sensitive receptors.[42]

The risk calculations incorporate OEHHA's age sensitivity factors, which account for increased sensitivity to carcinogens during early-in-life exposure. Chronic cancer and hazard risks were calculated using values from OEHHA's 2015 HRA guidance.[43] In accordance with BAAQMD guidance, this analysis evaluates cancer risks at nearby worker sites beginning at age 16, with receptors exposed to emissions throughout the full construction duration of approximately 2 years and 23 years of operation. For nearby schools, cancer risks were estimated based on the age group of students eligible to enroll (e.g., beginning in the 4th grade at age 9, with students being exposed to emissions throughout the full construction duration of approximately 2 years and 7 years of operation through completion of 12th grade).

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37 OEHHA. 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments*. February. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: October 4, 2023.

38 BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

39 SCAQMD. 2008. Final Localized Significance Threshold Methodology. Revised July. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2. Accessed: October 4, 2023.

40 Emissions from off-road equipment were modeled using a release height consistent with SCAQMD guidance and representative of the proposed equipment types (SCAQMD 2008). This parameter does not depend on a project's geographic location and is appropriate for use outside of the SCAQMD's jurisdiction.

41 OEHHA. 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments*. February. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: October 4, 2023.

42 BAAQMD. 2022. AERMOD-Ready Meteorological Data. November. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools/ceqa-modeling-data. Accessed: October 4, 2023.

43 OEHHA. 2015. Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments. February. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: October 4, 2023.

The HRA for the Project includes an evaluation of health impacts from exposure to DPM (represented by PM10 exhaust), including cancer risks and chronic non-cancer risks, and ROG from the proposed lab space, including cancer risks, chronic non-cancer risks, and acute risks. This analysis also evalutes annual concentrations of PM2.5 from exahust and fugitive dust sources.

As discussed above, the unmitigated emissions generated by Project construction and operation would not exceed the applicable BAAQMD thresholds. Therefore, the Project's estimated unmitigated emissions were used to estimate health risks impacts at offsite sensitive receptors. Table 6 presents the maximum unmitigated health risks associated with DPM and ROG emissions during Project construction and operation, as well as the maximum unmitigated annual PM2.5 concentration, at analyzed sensitive receptor locations. Refer to Appendix A for detailed model assumptions, output files, and risk calculations.

Table 6. Estimated Unmitigated Project-Level Health Risk Results from Project Construction and Operation

Offsite Receptor Type	Cancer Risk (cases per million)	Non-Cancer Chronic Risk	Acute Hazard Index	Annual PM2.5 Concentrations (µg/m³)
Maximally Exposed Individual (School)	<u>15.5</u>	<0.1	<0.1	N/A
Maximally Exposed Individual (Worker)	6.5	0.1	<0.1	N/A
Maximum Annual PM2.5 Concentration	N/A	N/A	N/A	<u>0.5</u>
BAAQMD Significance Threshold	10.0	1.0	1.0	0.3
Exceeds Threshold?	**Yes**	**No**	**No**	**Yes**

µg/m³ = micrograms per cubic meter; PM2.5 = particulate matter with an aerodynamic diameter of 2.5 or less. Notes: Exceedances of thresholds are indicated with underlined text.
Non-cancer HI and annual PM2.5 concentrations were based solely on annual construction emissions.

As shown in Table 6, there would be an exceedance of the cancer risk threshold for the maximally exposed individual school receptor. In addition, the maximum annual PM2.5 concentration would exceed the applicable BAAQMD threshold, and this exceedance would occur where workers may be present at the building adjacent to the Project's southwestern border currently occupied by Build Ur Dream Builders Inc. As a result, this impact would be ***significant***, and mitigation is required to reduce these impacts below the applicable BAAQMD thresholds.

The primary cause of the cancer risk exceedance is the operation of diesel-fueled construction equipment, which generate PM10 exhaust emissions. Dust from material movement, vehicles traveling to and from the Project site, and operation of diesel-fueled construction equipment are the primary drivers of PM2.5 (exhaust and dust) emissions and the significant PM2.5 impact. **Mitigation Measure AQ-2** would be required to reduce the Project's DPM and PM2.5 emissions from off-road equipment by requiring EPA Tier 4 Final diesel engines.

Mitigation Measure AQ-2: Use Clean Diesel-Powered or Electric Equipment during Construction to Control Construction-Related Emissions.

The Project applicant shall ensure that all off-road diesel-powered equipment greater than 50 horsepower used during construction shall be equipped with EPA-approved Tier 4 Final engines or cleaner to reduce PM2.5 and PM10 exhaust emissions. The construction contractor shall submit evidence of the use of EPA-approved Tier 4 Final engines or cleaner to the City prior to the commencement of Project construction activities.

Table 7 presents the maximum health risks associated with DPM and ROG emissions during Project construction and operation, as well as the maximum mitigated annual PM2.5 concentration, at analyzed sensitive receptor locations with implementation of Mitigation Measure AQ-2.

Table 7. Estimated Mitigated Project-Level Health Risk Results from Project Construction and Operation

Offsite Receptor Type	Cancer Risk (cases per million)	Non-Cancer Chronic Risk	Acute Hazard Index	Annual PM2.5 Concentrations ($\mu g/m^3$)
Maximally Exposed Individual (School)	2.5	<0.1	<0.1	N/A
Maximally Exposed Individual (Worker)	3.3	0.1	<0.1	N/A
Maximum Annual PM2.5 Concentration	N/A	N/A	N/A	0.2
BAAQMD Significance Threshold	10.0	1.0	1.0	0.3
Exceeds Threshold?	**No**	**No**	**No**	**No**

$\mu g/m^3$ = micrograms per cubic meter; PM2.5 = particulate matter with an aerodynamic diameter of 2.5 or less.
Notes:
Exceedances of thresholds are indicated with underlined text.
Non-cancer HI and annual PM2.5 concentrations were based solely on annual construction emissions.

As shown in Table 7, with Mitigation Measure AQ-2, the Project's estimated health risks and annual PM2.5 concentrations would be below applicable BAAQMD significance thresholds at the maximally exposed individual receptor locations for school and worker receptors. Thus, with the use of equipment with Tier 4 Final engines, the Project would not expose sensitive receptors to substantial pollutant concentrations resulting in significant health risk impacts. This impact would be considered ***less than significant with mitigation***.

Cumulative Health Risk Assessment

According to BAAQMD's CEQA Guidelines, combined risk levels should be determined for all TAC sources within 1,000 feet of a project site and compared to BAAQMD's cumulative health risk thresholds.[44] Existing TAC sources and the Project's construction and operational emissions could contribute to a cumulative health risk for sensitive receptors near the Project site.

Existing TAC sources include permitted stationary sources (e.g. emergency generators and gas stations), roadways, railways, and other development projects in the surrounding area. As described in *Existing TAC Sources and Health Risks*, there is one permitted facility with an associated health risk within 1,000 feet of the Project site. BAAQMD's inventory of stationary health risks was used to estimate the combined level of health risk from the existing permitted facility in combination with the Project's contributions. Mobile sources on railways and roadways, including US 101 and Old Bayshore Highway, would also generate TAC emissions. Geographic information system (GIS) raster files provided by BAAQMD were used to estimate roadway and railway emissions within 1,000 feet of the Project site.[45] None of the development projects that have recently been or may soon be approved in the City would be close enough (i.e., within 1,000 feet) to the Project site to combine with Project health risks.

[44] BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

[45] BAAQMD. 2022. *Health Risk Screening and Modeling*. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools/health-risk-screening-and-modeling. Accessed: October 6, 2023.

The timeframe for demolition of the building at 1499 Old Bayshore Highway, located on the Project site, is currently unknown but could occur concurrently with construction of the Project. However, emissions and health risks impacts associated with these demolition activities are expected to be short in duration and less intensive than Project construction activities. Moreover, even if these demolition activities were to occur concurrently with Project construction, health risks from demolition at 1499 Old Bayshore Highway would be minor in comparison to the risks from nearby roadways, which are the dominant source of health risks in the Project area, as shown in Table 8. Thus, despite uncertainty regarding the timeframe for demolition activities at 1499 Old Bayshore Highway, this analysis nonetheless provides a conservative evaluation of cumulative risk levels from the Project in combination with existing TAC sources.

Table 8 shows the mitigated health risk values for the Project's maximally affected receptors and the health risk contributions from existing stationary, roadway, and rail sources within 1,000 feet of the Project site. The sum of mitigated Project health risk values and existing background health risk values was compared to the BAAQMD's cumulative thresholds. Additional data on individual background contributions from existing sources are included in Appendix A.

As shown in Table 8, health risks associated with existing stationary, roadway, and railway sources in combination with the Project would not exceed BAAQMD's cumulative thresholds. Therefore, the cumulative effect of health risks associated with TACs emitted by the Project in combination with health risks associated with existing TAC sources would not result in cumulatively considerable local health risks at sensitive land uses. This impact would be ***less than significant with mitigation***.

Asbestos

Asbestos is a naturally occurring mineral that was previously used in building construction because of its heat resistance and strong insulating properties. Exposure to asbestos, however, has been shown to cause many disabling and fatal diseases, including lung cancer, mesothelioma, and pleural plaques. The potential for naturally occurring asbestos on site is low, and demolition of the existing hardscape (asphalt and concrete) and buildings on the Project site may expose workers and nearby receptors to asbestos if the material was used during construction of the original hardscape and buildings. However, the Project would comply with CARB's ATCM for Construction, Grading, Quarrying, and Surface Mining Operations and BAAQMD Regulation 11, Rule 2: Asbestos, Demolition, Renovation, and Manufacturing. Because the Project would be required to control asbestos emissions according to applicable CARB and BAAQMD regulations, receptors would not be exposed to substantial asbestos risks. Impacts associated with asbestos emissions would thus be ***less than significant***.

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

Odor impacts could occur if a project proposes a new odor source near existing receptors. The Project site is surrounded by primarily commercial and industrial uses, and there are many offsite workers within 1,000 feet of the Project site. According to BAAQMD, land uses associated with odor complaints can include wastewater treatment plants, landfills, food manufacturing plants, and other odor-generating facilities, as detailed in Table 5-4 of BAAQMD's CEQA Guidelines.[46]

[46] BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

Table 8. Cumulative Mitigated Health Risk Results

Pollutant/Receptor Type	Cancer Risk (cases per million)	Non-Cancer Chronic Risk	Acute Hazard Index [a]	Annual PM2.5 Concentrations (µg/m³)
Health Risks (MEI - Student)				
Existing Sources				
Stationary Source	4	<0.1	-	N/A
Roadway Source	11	<0.1	-	N/A
Rail Source	7	<0.1	-	N/A
Total	22	0.1	-	N/A
Project Construction & Operation (DPM and ROG Emissions)	16	<0.1	<0.1	N/A
Total cumulative - Student	**37**	**0.1**	**<0.1**	**N/A**
BAAQMD threshold	100	10.0	10.0	0.8
Exceeds threshold?	***No***	***No***	***No***	***N/A***
Health Risks (MEI - Worker)				
Existing Sources				
Stationary Source	15	0.1	-	N/A
Roadway Source	11	<0.1	-	N/A
Rail Source	8	<0.1	-	N/A
Total	34	0.1	-	N/A
Project Construction & Operation (DPM and ROG Emissions)	**3**	**0.1**	**<0.1**	N/A
Total cumulative - Worker	**37**	**0.2**	**<0.1**	**N/A**
BAAQMD threshold	100	10.0	10.0	0.8
Exceeds threshold?	***No***	***No***	***No***	***N/A***
Maximum Annual PM2.5				
Existing Sources				
Stationary Source				-
Roadway Source				0.4
Rail Source		N/A		<0.1
Total				0.4
Project construction				0.2
Total cumulative – PM2.5	**N/A**	**N/A**	**N/A**	**0.6**
BAAQMD threshold	100	10.0	10.0	0.8
Exceeds threshold?	***N/A***	***N/A***	***N/A***	***No***

µg/m³ = micrograms per cubic meter; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less.

[a] BAAQMD stationary, roadway, and rail health risk data does not include acute risks.

Notes:

Exceedances of thresholds are indicated with underlined text.

Non-cancer HI and annual $PM_{2.5}$ concentrations were based solely on annual construction emissions.

Potential odor emitters during construction activities include diesel exhaust, asphalt paving, and the use of architectural coatings and solvents. Odors during operation could result from vehicle exhaust and the reapplication of architectural coatings, but these odors would be limited to areas adjacent to the building. Startup and maintenance testing of emergency generators may also result in odors. Both construction equipment- and generator-related odors would be temporary and would dissipate rapidly with distance.

The Project does not propose any changes that would include odor-generating facilities. Finally, the Project would comply, as applicable, with BAAQMD's Regulation 7, which limits emissions of odorous compounds from all non-exempt entities within BAAQMD jurisdiction. Accordingly, Project construction and operation are not expected to create objectionable odors affecting a substantial amount of people. This impact would be ***less than significant***.

IV. Biological Resources

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
c.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
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?		X		
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?				X

Setting

The Project site is in an urban area and surrounded by commercial development. The site is predominantly developed, consisting of three buildings and surface parking. There are some trees and landscape vegetation around the existing commercial buildings including 11 trees, 4 of which are protected under the City's Municipal Code.[47] Although the Project site is predominantly developed, some natural resource features are located nearby but outside the site. A portion of Mills

[47] Requirements regarding removal of protected trees are described in the City of Burlingame Municipal Code, Section 11.06.060: and include notices and permits required for removal or work significantly affecting protected trees and specific replanting guidance (see Section 2.2.5 in the *Project Description*).

Creek, which is within an engineered channel, is directly adjacent to the southern boundary of the Project site. Mills Creek is considered a potentially jurisdictional water because it drains into the Bay, which is considered a water of the United States. Vegetation within the channel is limited to a thin layer near the water's edge. This thin strip of vegetation does not support any marshland species. Furthermore, the vegetation on the Project site, directly adjacent to the Mills Creek channel, appears to be ruderal and landscape vegetation; it is not characteristic of riparian or marshland vegetation. Mills Creek does not support any special-status species (Appendix B).

The Shorebird Sanctuary is east of the Project site, across Old Bayshore Highway. The Shorebird Sanctuary is a marshland at the mouth of Mills Creek that serves as a sanctuary for 10 to 15 species of birds.

The Biological Resources Report prepared by H.T. Harvey on October 31, 2023, was developed and relied upon for this section (Appendix B); the report is based on a desktop review and site survey. Prior to conducting field work, H. T. Harvey & Associates ecologists reviewed the project description, project plans, and arborist report (HortScience 2022) provided by ICF through August 2023; the July 2019 IS/MND for a previously-proposed 1499 Bayshore Highway Project (ICF 2019); aerial images (Google Inc. 2023); a USGS topographic map; the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB) (2023); and other relevant reports, scientific literature, and technical databases.

In addition, for plants, H.T. Harvey reviewed all species on current California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1A, 1B, 2A, 2B, 3, and 4 lists occurring in the San Mateo, California U.S. Geological Survey (USGS) 7.5-minute quadrangle (which includes the project site) and three adjacent quadrangles to the north, northwest, and west: San Francisco South, Hunter's Point, and Montara Mountain. H.T. Harvey also queried the CNDDB (2023) for natural communities of special concern that occur in the study area, and reviewed records of birds reported in nearby areas, such as Burlingame Shorebird Sanctuary, San Francisco Bay Trail – Burlingame, Bayfront Park – Millbrae, and Bayside Park, on eBird (Cornell Lab of Ornithology 2023). Finally, H.T. Harvey consulted iNaturalist for records of common and select special-status species in the project region (iNaturalist 2023).

The report also relied on a review of the Burlingame General Plan and final EIRs (MIG 2018, City of Burlingame 2018). The Project site is part of the Burlingame General Plan area, and development on the site is therefore subject to requirements of the General Plan and its EIR, as appropriate. For the purposes of this section, the Project area is defined as the area within a 5-mile radius surrounding the Project site.

Discussion

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

The following relies on the Biological Resources Report's Table 2 that presents a summary of special-status animal species, their status, and potential occurrence on the Project site (Appendix B)

Impacts on Water Quality, Special-Status Fish, Designated Critical Habitat, and Essential Fish Habitat

The Project does not involve construction within 2 feet of top of bank and would thus not result in direct impacts within the bed and banks of Mills Creek, which flows adjacent to and outside the Project site's southeastern boundary such that the Project would not have direct impacts on special-status fish, designated critical habitat, or essential fish habitat. However, indirect impacts on water quality in the creek could potentially occur due to Project construction activities. As stated in Impact X(a), the Construction General Permit would require the Project to implement a Stormwater Pollution Prevention Plan (SWPPP) with BMPs during construction to protect water from potential contaminants in stormwater runoff from the site. The Project would also be subject to the requirements of Provision C.3 of the Municipal Regional Stormwater Permit (MRP). Therefore, indirect impacts on water quality from construction of the Project would be avoided and minimized by implementing erosion and sediment control measures, as well as BMPs for work near aquatic environments. Thus, the Project would not result in substantial adverse indirect effects on water quality, fish, or other aquatic animals; impacts would be ***less than significant***.

Impacts on Nonbreeding Special-Status Birds

Several special-status bird species may occur within the Project site as nonbreeding migrants, transients, or foragers, but they are not known or expected to breed or occur in large numbers within or near the Project site. These are the tricolored blackbird, Vaux's swift, olive-sided flycatcher, yellow warbler, Alameda song sparrow, and Bryant's savannah sparrow. The tricolored blackbird (a state threatened species) is not expected to occur on the Project site as a breeder due to the absence of suitable breeding habitat, but individuals may occur occasionally as foragers during the non-breeding season. The Vaux's swift and olive-sided flycatcher (both California species of special concern), breed in forested habitats, which are not present on the Project site. However, they may occur as migrants. Other avian California species of special concern, including the Alameda song sparrow, Bryant's savannah sparrow, and yellow warbler, breed in or near wetland or riparian habitats; no suitable breeding habitat for these species is present on the site, but these species may occur on the Project site as nonbreeding visitors.

Project activities would result in some loss or disturbance of foraging habitats and could disturb foraging or roosting individuals of these species. Construction activities might result in a temporary direct impact through the alteration of foraging patterns (e.g., avoidance of work sites because of increased noise and activity levels during project construction) but would not result in the loss of individuals, as individuals of these species would be able to move away from any construction areas or equipment before they could be injured or killed. Further, the Project site does not provide important foraging habitat used regularly or by large numbers of individuals of any of these species. As a result, the Project would have very little impact on these species' regionally available foraging habitat and no substantive impact on regional populations of these species. For these reasons, impacts of the Project on nonbreeding special-status birds would be ***less than significant***.

Impacts on the Monarch Butterfly

While monarch butterflies are known to form roost aggregations along the San Francisco Bay in the Project area, there is no expectation that such roosts will form in the future on or near the Project site due to a lack of suitable roosting habitat. Further, this species is not expected to breed on the Project site due to the absence of milkweed, its larval host plant, and it is expected to make little use of the site under existing conditions due to the absence of high-quality nectar sources. Rather,

monarch butterflies are expected to occur on the site only as occasional visitors during migration. Project construction and operation are not expected to result in injury or mortality of monarchs, or the loss of any important foraging habitat for migrant individuals. Therefore, impacts on this species would be ***less than significant***.

Impacts on Animals due to Increased Lighting

A description of background literature and research on the effects of lighting on animals is provided in Appendix B. The Project would result in the construction of buildings and other features (e.g., pedestrian walkways and open space areas) that would necessitate lighting within and around the Project footprint. Lighting from the Project would be the result of light fixtures illuminating buildings, building architectural lighting, and parking lot and pedestrian lighting. Depending on the location, direction, and intensity of exterior lighting, this lighting could potentially spill into adjacent natural areas, such as Mills Creek or the Bay. Much of the Project site is currently lit at night, so it is unknown whether the Project would result in an increase in lighting relative to existing conditions. Ultimately, the Project intends to minimize light spillage offsite as described in Chapter 2, *Introduction/Project Description* (Section 2.2.4 *Building Design and Lighting*).

While the Project's exterior lighting would be limited to landscape, safety, and circulation lighting, detailed information regarding the Project's proposed lighting design was not available at the time of this assessment. If lighting along Mills Creek, the Shorebird Sanctuary, and the Bay were to increase, animals using these areas may be subject to increased predation, decreased habitat availability (for species that show aversions to increased lighting), and alterations of physiological processes if development under the Project produces appreciably greater illuminance than the existing conditions. This impact on local wildlife populations is potentially significant under CEQA due to the high ecological value of the adjacent portion of the Shorebird Sanctuary and San Francisco Bay (and to a lesser extent, Mills Creek). In addition, lighting from the Project also has potential to attract and/or disorient birds, especially during inclement weather when nocturnally migrating birds descend to lower altitudes. As a result, some birds moving along the Bay at night may be (1) attracted to the site, where they are more likely to collide with buildings; and/or (2) disoriented by night lighting, potentially causing them to collide with the buildings (bird collision impacts are described further in Impact IV.(d)). Mitigation Measure BIO-1 would reduce impacts of lighting on animals to a ***less-than-significant level with mitigation incorporated***.

Mitigation Measure BIO-1. Lighting Impact Reduction Measures.

The following measures shall be implemented to reduce spillover of lighting into, or glare/increased luminance perceived by animals using Mills Creek, the Shorebird Sanctuary, and the Bay, as well as adverse effects of lighting on migratory birds.

- Through a combination of proper fixture selection, low mounting height, glare shielding, and orientation/aiming of light fixtures, the design team shall actively control undesirable spill light towards sensitive habitat areas. All exterior lighting shall be fully shielded to block illumination from shining outward towards Mills Creek, the Shorebird Sanctuary, and the Bay, and to prevent the lit portions of these fixtures (i.e., the lamps) from being visible to fish, birds, or mammals in the water or mudflats in these adjacent areas. Limited uplighting may apply to select building facade areas and landscape features that are at least 50 feet from the high tide line along the Bay and at least 35 feet from the high tide line along Mills Creek. These uplight fixtures shall incorporate glare shields and strategic aiming to control

undesirable spill light; shall incorporate timeclock control to turn off uplighting from 10pm until the next evening; and shall use 40-Watt maximum lamps to minimize light output.

- The Project shall demonstrate, initially via computer calculations and via field measurements following Project construction, that the increase in illumination from all exterior site and façade lighting shall not exceed 0.1 footcandles as measured on the surface of the water of Mills Creek, the Shorebird Sanctuary, and the Bay.
- Except as indicated in the previous bullet (and the exceptions for public streets), fixtures shall comply with lighting zone LZ-2, Moderate Ambient, as recommended by the International Dark-Sky Association (2011) for light commercial business districts and high-density or mixed-use residential districts. The allowed total initial luminaire lumens for the project site is 2.5 lumens per square foot of hardscape, and the backlight-uplight-glare rating for individual fixtures shall not exceed B3 or G2, as follows.
    - B3: 2,500 lumens high (60–80 degrees), 5,000 lumens mid (30–60 degrees), 2,500 lumens low (0–30 degrees).
    - G2: 225 lumens (forward/back light 80–90 degrees), 5,000 lumens (forward 60–80 degrees), 1,000 lumens (back light 60–80 degrees asymmetrical fixtures), 5,000 lumens (back light 60–80 degrees quadrilateral symmetrical fixtures).
- Lighting for public streets, roadways, highways, and traffic signage lighting, including lighting for driveway entrances occurring in the public right-of-way, shall be excluded from these backlight-uplight-glare rating limitations to support public safety and proper illumination of public streets.
- Exterior lighting shall be minimized in accordance with recommendations from the International Dark-Sky Association (2011) from midnight until dawn, at a minimum, except as needed for safety and City code compliance.
- Spillage of lighting from building interiors shall be minimized using occupancy sensors, dimmers, or other mechanisms from midnight until dawn, at a minimum, during bird migration seasons (February–May and August–November). If desired, this measure may be voluntarily implemented year-round.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Riparian grassland habitat is located below the top bank of Mills Creek, adjacent to the Project site. However, no riparian grassland is located on the Project site, and because the Project does not involve any construction within 2 feet from top of bank, no direct impacts on riparian habitats would result from Project construction. Indirect impacts on the riparian banks may occur in the form of shading from the proposed eight-story office/R&D building and the seven-level parking garage to be constructed on the Project site. These buildings would be set back from the top of bank of Mills Creek by approximately 40 to 90 feet; thus, the vegetation would be partially shaded during the winter months when the sun is in the north. While permanent shading of vegetation may cause it to weaken, decrease in cover, or even die off leaving bare soil exposed, nonnative-dominated annual grassland such as this is typically able to persist under partial shading. Thus, no substantial adverse impacts on riparian habitats are expected to result from the Project, and impacts on riparian grassland would be ***less than significant***.

c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

Tidal salt marsh habitats within the banks of Mills Creek are considered a sensitive natural community as "northern coastal salt marsh." The Project would not have direct impacts on Mills Creek and its tidal salt marsh or open water/tidal aquatic habitat because it does not involve any construction within 2 feet from top of bank. While construction activities would have the potential to result in impacts on water quality (such as stormwater runoff), which could degrade these sensitive habitats, compliance with stormwater requirements described in Impact X(a) would reduce impacts on water quality within wetlands to less-than-significant levels. Following Project construction, the Project site would treat stormwater on site, in accordance with LID treatment measures and mechanical treatment, per the NPDES program.

Tidal wetlands within Mills Creek are already shaded by the steep, engineered banks of the channel during morning and evening hours. While the Project buildings would partially shade adjacent habitats associated with Mills Creek during the evening hours and winter, this increase in shading is not expected to result in substantial loss or degradation of tidal wetlands within the channel of Mills Creek. Thus, these impacts would be considered ***less than significant***.

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

Impacts on Roosting Bats

Common bat species, such as the Yuma myotis and Mexican free-tailed bat, can potentially roost in small numbers in trees or buildings on the Project site. No evidence of a colony of roosting bats was detected on the site during the August 2023 focused survey, but the presence of small numbers of common species of roosting bats could not be ruled out. The removal of trees and buildings on the site has the potential to result in the loss of a small colony of common species of roosting bats. When trees or buildings containing roosting colonies or individual bats are removed or modified, individual bats can be physically injured or killed, can be subjected to physiological stress from disturbance during torpor, or can face increased predation because of exposure during daylight. In addition, nursing young may be subjected to disturbance-related abandonment by their mothers. However, the trees and buildings present on the site only provide marginal habitat for roosting bats, and initial surveys concluded that if common species of roosting bats were to roost in these structures, they would occur only in small numbers. Therefore, the loss of the marginal habitat or a small number of individuals of common bat species would not have a substantial adverse effect on local and regional populations of these species, and thus the impact would be ***less than significant***.

Impacts on Terrestrial Wildlife Movement

The Project site does not provide well-defined movement pathways for animals within or through the Project site due to the density of development in the Project region and the lack of continuous, well-vegetated pathways through the nearby urban areas. Wildlife species may move through the area using cover and refugia as they find them available, and mammals and reptiles may move along the Bayshore. However, connectivity along Mills Creek is interrupted by Old Bayshore Highway, US 101, and other roads and culverted areas. The Project site is not an important area for movement by non-flying wildlife, and it does not contain any high-quality corridors allowing dispersal of such

animals. The proposed elevated sea wall along Mills Creek and the bay shoreline are not proposed to extend high above the surrounding lands, but rather embedded (and largely buried) within Project landscaping. For all these reasons, the Project would not result in a significant impact on terrestrial animal movement corridors. Rather, the planting of more extensive landscaping than is currently present on the site is expected to improve conditions for dispersing wildlife by providing better cover and higher-quality resources (such as food and resting sites) than currently exist. The impact would be ***less than significant***.

Impacts due to Bird Collisions with Buildings

Under existing conditions, terrestrial land uses and habitat conditions on the Project site and in surrounding area consist primarily of developed areas such as buildings, parking lots, and busy roadways. Vegetation in most of these areas is very limited in extent and consists of nonnative landscape trees and shrubs. Mills Creek borders the Project site on the east and consists of narrow tidal channel with small, isolated in-channel tidal wetlands, and, similar to the surrounding areas, it is lined with nonnative ruderal grassland and scattered, nonnative, ornamental landscape trees. Nonnative vegetation supports fewer of the resources required by native birds than native vegetation, and the structural simplicity of the vegetation (without well-developed ground cover, understory, and canopy layers) further limits resources available to birds. Thus, although urban-adapted bird species regularly use the vegetation on the Project site and surrounding developed areas, they typically do so in low numbers. As a result, the number of individual landbirds that inhabit and regularly use vegetation on the Project site at any given time under existing conditions is relatively low. Following Project construction, the number of birds that use the site may increase due to the proposed expansion of landscaped areas on the site and the planting of additional landscape trees, shrubs, and herbaceous vegetation. Proposed landscape plantings throughout the Project site would consist of a mix of native and nonnative trees, shrubs, and herbaceous plants. Overall, however, due to the continued lack of large areas of native vegetation and lack of structural complexity, the addition of landscaped areas to the Project site would not create high-quality bird habitat within this area, and any increase in bird abundance and diversity as a result of the proposed landscaping would be modest.

The Shorebird Sanctuary, approximately 150 feet to the northeast, supports a small, isolated tidal marsh habitat, and the open waters of the Bay lie beyond the Shorebird Sanctuary, approximately 500 feet to the northeast. These habitats provide open-water, tidal marsh, and shoreline foraging habitat for many species of waterbirds and shorebirds. Based on observations by birders over the years, approximately 127 species of birds have been observed at the Shorebird Sanctuary, 142 species of birds have been observed along the Bay Trail approximately 0.5-mile northwest of the Project site, and 130 species have been observed at Bayside Park, approximately 0.5-mile to the southeast (page B-11, Appendix B). These species include year-round resident, migrant, and wintering landbirds (associated with upland areas), shorebirds (associated with the shoreline), and waterbirds (associated with open water habitat). Records from eBird suggest that some species of shorebirds and waterbirds can occur in these areas in large numbers (e.g., 100–200 individuals), but the majority of these species occur in smaller flocks.

The Project site is separated from habitat that supports these birds along the Bay by the Old Bayshore Highway, but small numbers of birds that are attracted to these nearby marsh and open water habitats may occasionally move inland along Mills Creek, where they may forage in tidal aquatic and tidal wetland habitats adjacent to the Project site. However, due to the limited extent and low quality of the habitats in Mills Creek, shorebirds and waterbirds are expected to occur there

only infrequently and in very small numbers, if at all. In general, shorebirds and waterbirds that are attracted to nearby marsh and open water habitats are unlikely to disperse onto the Project site, as these species are strongly associated with tidal habitats and open water. Therefore, no shorebirds or waterbirds are expected to move onto or through the Project site regularly or in substantial numbers.

Moderate numbers of migratory songbirds (landbirds) are often concentrated at the edge of the Bay during spring and fall migration, and the Project site is located close enough to the edge of the Bay to potentially attract these species. However, migrants tend to be attracted in greater abundance and diversity to more heavily vegetated areas such as riparian corridors or large, well-vegetated parks such as Coyote Point in San Mateo, Shoreline Park in Mountain View, or Sunnyvale Baylands Park in Sunnyvale for resting and foraging. No heavily vegetated areas or natural habitat such as riparian vegetation is present on or in the area of the Project site to attract these species, and no inland urban parks or open spaces are located nearby such that migratory songbirds would be expected fly past the site when traveling in between Bay habitats and inland habitats. Nevertheless, a number of migrant bird species will travel past the site at an altitude as low as the proposed buildings, and many of these birds will remain along Bay habitats in the Project area for days to weeks to rest and forage. As a result, even the limited amount of vegetation within and surrounding the Project site is expected to attract migrant landbirds in greater abundance compared to areas farther inland in urban areas of Burlingame.

Because birds do not necessarily perceive glass as an obstacle, windows or other structures that reflect the sky, trees, or other habitat may not be perceived as solid surfaces to be avoided, and birds may collide with these structures (page B-12, Appendix B). Similarly, transparent windows can result in bird collisions when they allow birds to perceive an unobstructed flight route through the glass (such as at transparent glass corners), or when the combination of transparent glass and interior vegetation (such as in planted atria) results in attempts by birds to fly through glass to reach vegetation. These risks are highest for buildings in or near areas of high avian activity or movement, such as migratory corridors, large open spaces, large waterbodies, and riparian habitats. Bird collision risk can be exacerbated by artificial lighting, as described in Impact IV (a).

The extent of glazing on a building and the presence of vegetation opposite the glazing are known to be two of the strongest predictors of avian collision rates (page B-12, Appendix B). Further, the greatest risk of avian collisions with glazed façades is in the area within 60 feet of the ground, because this is the area in which most bird activity occurs (page B-12, Appendix B). Therefore, collision risk on the proposed building would be highest within approximately 60 feet of the ground where landscape vegetation occurs adjacent to or opposite extensive areas of glass.

No glazing is present on the proposed parking structure, and birds are not expected to collide with its solid, opaque surfaces. However, the façades of the office/R&D building would be extensively glazed, and this glazing would face proposed landscape vegetation on the north, east, and south façades of the office/R&D building. The risk of bird collisions is expected to be higher along these façades within approximately 60 feet of grade, especially at transparent glass corners through which sight lines between vegetation on either side of the corners create potential flight paths for birds.

Relatively low numbers of resident and migratory landbirds are expected to occur on the Project site after Project completion. However, the proposed vegetation on the Project site is expected to attract migrant landbirds in greater abundance compared to areas farther inland in urban areas of Burlingame. In the absence of bird-safe treatment, enough individuals of common bird species could

potentially strike the buildings over the long term to result in a significant impact according to CEQA. However, as discussed in Chapter 2, *Introduction/Project Description*, the Project includes the use of bird-safe frit for all exterior glazing on the office/R&D building up to 64 feet above grade, and this frit pattern would consist of a permanent ¼-inch gray ceramic dot pattern on a 4-inch by 2-inch grid (with a horizontal spacing of 4 inches and vertical spacing of 2 inches) applied to the exterior surface of the glass. This treatment of the glazing would effectively minimize potential for bird collisions with the proposed buildings, and impacts due to bird collisions would be ***less than significant***.

Impacts on Nesting Birds

Construction disturbance during the avian breeding season (February 1 through August 31, for most species) could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests. Due to the small number of sensitive habitats on the Project site, the Project site supports only regionally common, urban-adapted breeding birds, and only a very small proportion of these species' regional populations. In addition, birds are expected to nest and forage on the Project site in greater abundance after Project construction is completed due to the proposed landscaping. All native bird species are protected from direct take by federal and state statutes (see Appendix B). Mitigation Measures BIO-2 shall be implemented to ensure that project activities comply with the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code; impacts would be ***less than significant with mitigation incorporated***.

Mitigation Measure BIO-2. Nesting Bird Avoidance.

A) Seasonal Avoidance. To the extent feasible, tree removal, demolition, and the start of construction activities shall be scheduled to avoid the nesting season. If such activities take place outside the nesting season, all impacts on nesting birds protected under the MBTA and California Fish and Game Code shall be avoided through adherence of B, C, and D of this mitigation measure. The nesting season for most birds in San Mateo County extends from February 1 through August 31.

B) Preconstruction/Pre-Disturbance Surveys. If it is not possible to schedule construction activities between September 1 and January 31, then preconstruction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no nests of migratory birds will be disturbed during project implementation. These surveys shall be conducted no more than 7 days prior to the initiation of tree removal, demolition, ground disturbance, or construction activities for each construction phase. During this survey, the biologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, buildings, and the ground) in and immediately adjacent to the impact areas for migratory bird nests.

C) Buffers. If an active nest is found within areas that would be disturbed by project activities, the ornithologist shall determine the extent of a construction-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code shall be disturbed during project implementation.

D) Inhibition of Nesting. If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the Project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of

nests in this vegetation and prevent the potential delay of the Project due to the presence of active nests in these substrates.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impacts Due to the Removal of Ordinance-Sized Trees

The Project would remove all existing trees on the Project site, including 4 trees that meet the definition of "protected" trees by City. Per the City of Burlingame Tree Ordinance, permits from the City's planning and building department and payment of a fee are required for the removal of any trees which meet the definition of "protected" tree. The removal of trees protected by the City tree ordinance, in the absence of compliance with the Municipal Code, would be considered potentially significant under CEQA. In accordance with the provisions of the City of Burlingame tree protection ordinance, the Project would comply with standard City tree removal permit conditions and replace trees that are removed in accordance with these tree removal policies; 11 trees would be removed, and 35 would be planted. Such compliance would reduce any potential impacts due to conflicts with the City's tree preservation ordinance to ***less-than- significant*** levels.

Impacts Due to Conflicts with the City of Burlingame's Bird-Safe Design Requirements

The zoning code for the City references bird-safe design requirements within the design guidelines of the Bay Front Commercial (BFC) zoning district in which the 1499 Bayshore project is located. Section 25.12.060 (Design Principles for Bayfront Commercial Zoning District) includes the following:

> ***Bird Friendly Design.*** All development shall incorporate bird-friendly design that minimizes potential adverse impacts to native and migratory birds, such as fritted or patterned glass, projecting architectural features, lighting design, and screening with trees.

As discussed in Impact IV (d), the Project includes the use of bird-safe frit for all exterior glazing up to 64 feet above grade, which, would minimize potential adverse impacts on native and migratory birds. Such compliance would reduce impacts due to conflicts with the City's bird-safe design requirements to ***less-than significant*** levels.

f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

The San Bruno Mountain Habitat Conservation Plan (HCP) is the only HCP that has been approved in San Mateo County, but this plan does not cover the Project site or the surrounding area. No Natural Community Conservation Plans (NCCP) have been approved or are in preparation in San Mateo County. Therefore, the proposed Project would not conflict with any adopted HCPs or NCCPs, or with any other approved local, regional, or state habitat conservation plans. There would be ***no impact***.

V. Cultural Resources

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

Setting

ICF conducted a built environment and archaeological resource study (Appendix C) to inform the baseline conditions for cultural resources at the Project site. To identify cultural resources at the Project site, the following tasks were completed for this IS/MND: (1) inventory of built environment resources that require evaluation for listing in the California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP); (2) a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System; (3) a review of historical maps aerial photographs to assess the potential for buried precontact and historic-period archaeological deposits; and (4) a field survey of the Project site by a qualified archaeologist.

Built Environment Resources

Two buildings used as commercial offices and one commercial warehouse are located within the boundaries of the two-parcel Project site at APNs 026-322-150 (1499 Bayshore Highway and 801 Mahler Road) and 026-322-050 (825 Mahler Road). The two-story commercial office building with the address 1499 Bayshore Highway will be demolished prior to Project construction as part of a separate, adjacent project.[48] The one-story commercial office building at 801 Mahler Road dates to circa 1960–1962. The one commercial warehouse building at 825 Mahler Road was built in 1962, based on data from the San Mateo County Assessor. The buildings are located within an area developed with commercial office and warehouse buildings in the 1950s and 1960s.

The buildings at 801 Mahler Road and 825 Mahler Road were constructed more than 50 years ago and exceed the age threshold above which a built environment resource (e.g., building, structure, object, district) has the potential to meet the eligibility requirements of the CRHR and could thus qualify as a significant historical resource for the purposes of CEQA review. Neither building has been previously evaluated for listing in the CRHR or NRHP or otherwise considered for CEQA historical resource status. Accordingly, in support of the current analysis, the buildings at 801 Mahler Road and 825 Mahler Road were evaluated for listing in the CRHR and NRHP. The buildings'

[48] The building at 1499 Bayshore Highway was previously evaluated for CR/NR eligibility and found not to be eligible.

physical characteristics, historic context, site history, and NRHP/CRHR evaluations were documented on Department of Parks and Recreation (DPR) 523A (Primary Record) and 523B (Building, Structure, Object) forms, completed in March 2018 and revised in July 2023. These forms are included in Appendix C. A summary of the evaluations for 801 Mahler Road and 825 Mahler Road under NRHP/CRHR Criteria A/1 through D/4 follows.

- Criteria A/1 (significant events): The buildings are common examples of commercial properties built in Burlingame during the post-World War II era and do not appear to have contributed substantially to the local, regional, or national economy or other significant patterns of events.
- Criteria B/2 (significant persons): No individuals associated with either building appear to have made significant contributions to local, state, or national history.
- Criteria C/3 (significant architecture or construction): The buildings at 801 Mahler Road and 825 Mahler Road display general characteristics of Midcentury Modern commercial and small warehouse design and construction, which was commonly used during the mid-twentieth century in suburban communities such as Burlingame. Blunk & Hoskins Architects designed 801 Mahler Road. Blunk & Hoskins Architects was active locally for 3 years before the partnership disbanded. Many of their designs share duplicative features and design elements. Little information was published on the firm, and research did not reveal that their body of work was regarded as innovative or influential at the time the firm existed and neither the firm nor the individual partners appear to be master architects associated with Midcentury Modern commercial office building design. No architect was identified for the design of 825 Mahler Road. Neither building has a distinguished or innovative design that embodies the distinctive characteristics of a type, period, region, or method of construction. The buildings' architects remain unidentified, but neither building appears to represent the body of work of a master design professional, and neither possesses high artistic values.
- Criteria D/4 (information potential): The buildings appear unlikely to yield important information about historic construction methods, materials, or technologies.

As such, neither building is eligible for listing in the NRHP or CRHR because of a lack of significance under the NRHP/CRHR evaluative criteria. Therefore, the Project site does not contain built environment resources that qualify as historical resources for the purposes of CEQA review.

Archaeological Resources

Records Search Results. On August 1, 2023, ICF conducted a records search of the Project site and a 0.25-mile radius at the NWIC (NWIC File #23-0130). The NWIC records search did not identify any previously recorded cultural resources within the Project site and no previous cultural resources studies have been conducted within the Project site.

Map Review Results. ICF reviewed archival maps and aerial photographs for the presence of historic-period buildings and/or structures within the Project site and the general vicinity to assist in identifying the potential for historic-period archaeological deposits. Historic-period maps and aerial photographs indicate that the project site was an undeveloped salt marsh until mid-twentieth century; therefore, it is unlikely that any historic-period archaeological deposits (e.g., artifact-filled features such as wells or privies) are located within the Project site. Furthermore, saltmarsh tidal flats were not inhabited consistently or with sufficient intensity to accumulate substantive archaeological deposits; therefore, the Project site has low sensitivity for buried precontact archeological resources.

Field Survey. On July 11, 2023, ICF archaeologist performed a pedestrian survey of the Project site. The pedestrian survey consisted of inspecting the ground surface for indicators of surface and subsurface archaeological deposits such as precontact midden soils, lithic artifacts, shell, modified bone, and/or historic-era items such as ceramics, glass, or foundations. The Project site has been extensively developed and most of the ground surface is obscured by pavement and buildings. The survey targeted the area around Mills Creek. The creek bank was gated and inaccessible; however, the bank was viewed from the Old Bayshore Highway bridge that crosses Mills Creek, as well as from the parking lot of 808 Burlway Road, on the southwest bank of Mills Creek. The field survey did not identify any archeological resources within the Project site.

Discussion

a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

For a cultural resource to be considered a historical resource (i.e., eligible for listing in the California Register of Historical Resources), it must generally be 50 years or older. Under CEQA, historical resources can include precontact (i.e., Native American) archaeological deposits, historic-period archaeological deposits, historic buildings, and historic districts. CEQA requires that agencies considering projects that are subject to discretionary action shall consider the potential impacts on cultural resources that may occur from project implementation.

Built Environment Resources

The Project site neither contains nor is adjacent to any built environment resource that qualifies as a historical resource for the purposes of CEQA. Therefore, new development on the Project site would not have the potential to cause a substantial adverse change to the significance of any built environment historical resource, as defined in Section 15064.5 of the CEQA Guidelines. The Project would not demolish a significant historical resource or alter its physical characteristics, nor would it change elements within the historic setting of such a resource. Therefore, the Project would have ***no impact*** on built environment historical resources.

Archaeological Resources

Despite the negative results of the records search, literature review, and field survey, it cannot entirely be ruled out that archaeological cultural resources could be encountered during project construction activities. Should such deposits be encountered during project ground disturbance, a substantial adverse change in the significance of a historical resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (CEQA Guidelines Section 15064.5(b)(1)). To mitigate this potential impact, implementation of Mitigation Measure CULT-1: Accidental Discovery of Archaeological Historical Resources, potential impacts to historical resources would be reduced to a ***less-than-significant level with mitigation incorporated***.

> **Mitigation Measure CULT-1:** Should unknown precontact or historic-period archaeological materials such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic-period artifacts such as glass, metal, wood, brick, or structural remnants are encountered during Project construction activities; the construction contractor shall halt construction within 50 feet of the find and immediately notify the City. Construction activities shall be redirected and a qualified archaeologist, in consultation with the City, shall:

(1) evaluate the archaeological deposit to determine if it meets the CEQA definition of a historical or unique archaeological resource, and (2) make recommendations about the treatment of the deposit, as warranted. If the deposit does meet the CEQA definition of a historical or unique archaeological resource then it shall be avoided to the extent feasible by project construction activities. If avoidance is not feasible, then adverse effects to the deposit shall be mitigated as specified in CEQA Guidelines Section 15126.4(b) (for historic resources) or CEQA Section 21083.2 (for unique archaeological resources). This mitigation may include a thorough recording of the resource on DPR Form 523 records, or archaeological data recovery excavation. If data recovery excavation is warranted, CEQA Guidelines Section 15126.4(b)(3)(C), which requires a data recovery plan prior to data recovery excavation, shall be followed. If the significant identified resources are unique archaeological resources, mitigation of these resources shall be subject to the limitations on mitigation measures for archaeological resources identified in CEQA Sections 21083.2(c) through 21083.2(f).

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

According to the CEQA Guidelines, "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource" (CEQA Guidelines Section 15064.5(c)(1)). Those archaeological sites that do not qualify as historical resources shall be assessed to determine if these qualify as "unique archaeological resources" (California PRC Section 21083.2). Archaeological deposits identified during project construction shall be treated by the project sponsor—in consultation with a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology—in accordance with Mitigation Measure CULT-1. Therefore, with implementation of Mitigation Measure CULT-1, impacts related to archaeological resources would be ***less than significant with mitigation*** incorporated

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

Based on the archaeological investigation and analysis, there is a low potential for the disturbance of archaeological cultural resources or human remains as a result of the Project. In the event that human remains are identified during Project activities, these remains would be required to be treated in accordance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code, as appropriate. Section 7050.5 of the California Health and Safety Code states that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendent (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Compliance with the California Health and Safety Code would ensure that impacts to human remains would be ***less than significant***.

VI. Energy

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

Setting

Electricity

Grid electricity and natural gas service in Burlingame is provided by Pacific Gas & Electric (PG&E) and Peninsula Clean Energy (PCE). PG&E is a publicly traded utility company that generates, purchases, and transmits energy under contract with the California Public Utilities Commission. PG&E's service territory is 70,000 square miles in area, roughly extending north to south from Eureka to Bakersfield and east to west from the Sierra Nevada to the Pacific Ocean. PG&E's electricity distribution system consists of 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines.[49] PG&E electricity is generated by a combination of sources, such as hydropower, gas-fired steam, and nuclear energy, as well as newer sources of energy, such as wind turbines and photovoltaic plants, or solar farms. The grid, or bulk electric grid, is a network of high-voltage transmission lines that link power plants to substations. The distribution system, composed of lower-voltage secondary lines, is at the street and neighborhood level. It consists of overhead or underground distribution lines, transformers, switching equipment, and service "drops" that connect to the individual customer.[50] The Project site has existing overhead utility distribution lines along the southeast and southwest property lines (southwest, the lines run between 801 and 825 Mahler Road).

The City of Burlingame is part of PCE, San Mateo County's electricity provider, which distributes additional renewable power to the region. PCE is a community-choice energy (CCE) program, which is a locally controlled community organization that enables residents and businesses to have a choice regarding where their energy comes from. CCE programs allow local governments to pool the electricity demands of their communities, purchase power with higher renewable content, and reinvest in local infrastructure. Currently, PG&E delivers the power, maintains the lines, and bills

49 Pacific Gas & Electric. 2023. *Company Profile*. Available: https://www.pge.com/en_US/about-pge/company-information/profile/profile.page. Accessed: September 11, 2023.

50 Pacific Gas & Electric. 2020. *PG&E's Electric System*. Available: https://www.pge.com/includes/docs/pdfs/shared/edusafety/systemworks/electric/pge_electric_system.pdf Accessed: September 11, 2023.

customers, but the power is purchased by the CCE program from renewable energy sources such as solar, wind, hydroelectric, geothermal, and biomass.[51]

Natural Gas

PG&E's natural gas (methane) pipe delivery system includes 42,000 miles of distribution pipelines and 6,700 miles of transmission pipelines. Gas delivered by PG&E originates in gas fields in California, the Southwest, Rocky Mountains, and Canada. Transportation pipelines send natural gas from fields and storage facilities in large pipes under high pressure. The smaller distribution pipelines deliver gas to individual businesses or residences. PG&E gas transmission pipeline systems serve approximately 15 million gas and electric energy customers in California. The system is operated under an inspection-and-monitoring program in real time on a 24-hour basis. The program provides leak inspections, surveys, and patrols of the pipelines.[52]

Discussion

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

Project construction activities would require the use of trucks and other types of heavy equipment that operate on fossil fuels. Construction activities are expected to require truck trips related to the removal of demolished building material, to offhaul and recycle AC systems, as well as for the import of fill material and other construction supplies. In addition to haul trucks, Project construction would require the use of hydrocarbon-powered equipment, including an excavator, dump truck, backhoe, drill rig, tie-back rig, bulldozer, compactor, tower crane, and man lift.

As discussed in Section VIII, *Greenhouse Gas Emissions*, it is estimated that construction of the Project would generate approximately 2,776 metric tons of carbon dioxide equivalent (CO_2e). The emissions generated during construction of the Project would result primarily from the use of diesel-powered construction equipment (e.g., excavators). In addition, the Project is consistent with relevant policies from the City's Climate Action Plan (CAP) geared toward reducing construction-related GHG emissions. This is discussed further in Section VIII, *Greenhouse Gas Emissions*. Construction emissions would cease once construction of the Project is complete; therefore, they are considered short term. Construction would not result in wasteful, inefficient, or unnecessary consumption of energy resources. The impact would be ***less than significant***.

Operation

The Project would consume energy to support normal day-to-day operations associated with the proposed office and R&D uses. Vehicles and mass transit used by employees and visitors when traveling to and from the Project site would require energy in the form of gasoline, diesel, natural

51 Peninsula Clean Energy. 2023. *About Us - Background*. Available: https://www.peninsulacleanenergy.com/background/?_gl=1*1uzgbjs*_ga*NTQwMzYxNTIwLjE2OTQ0NjkwNTA.*_ga_QSB3HG0KQR*MTY5NDQ2OTA1NS4xLjEuMTY5NDQ2OTIwNi40Ny4wLjA. Accessed: September 11, 2023.

52 Pacific Gas & Electric. 2020. *Learn about the PG&E Natural Gas System*. Available: https://www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/natural-gas-system-overview.page. Accessed: September 11, 2023.

gas, and/or electricity. The specific fuel required for transport would depend on the mode of transportation and type of engine used to propel the vehicle. The Project would implement TDM measures to reduce the number of trips generated from the Project (see *Transportation Impact Analysis* in Appendix F). In addition, the Project would be located near multiple bus stops; with the closest about 0.25-mile from the Project site along SamTrans Route 292. Users of the site would be able to use these bus stops instead of a vehicle.

Energy would also be required to heat and cool the proposed building, provide indoor and outdoor lighting, and transport water/wastewater. The Project would be within the 70,000-square-mile PG&E service territory for electricity and natural gas generation, transmission, and distribution; because the building will be entirely electric, no gas would be required for operation. The building would achieve LEED Gold certification, and photovoltaic panels would be provided in a yet determined amount. In addition, PG&E continues to expand its renewable energy portfolio. Furthermore, PCE provides additional renewable power to the Project site. Because of the Project's size and location within an urban setting, buildout of the Project would not significantly increase energy demand within the service territory and would not require new energy facilities. Energy projections from energy providers within the state anticipate growth from development, such as the Project.

The Project would be required by law to adhere to California Code of Regulations (CCR) Title 24, the California Green Building Standards Code (CALGreen), and adopted City energy conservation ordinances and regulations. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject to the requirements of CALGreen, which contains both mandatory and voluntary measures. For non-residential land uses, there are several mandatory measures, including reductions in exterior light pollution, water-conserving plumbing fixtures and fittings, recycling standards, and specifications for efficient heating, ventilation, and air-conditioning (HVAC) systems. In addition, the Project would be required to implement relevant policies from the City's CAP geared toward reducing operation related GHG emissions. This is discussed further in Section VIII, *Greenhouse Gas Emissions*. Accordingly, with implementation of adopted state and City energy conservation measures, the Project would result in a ***less-than-significant impact*** with respect to the wasteful, inefficient, or unnecessary consumption of energy resources.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The Project would be required to use energy-efficient building materials and construction practices, in accordance with CALGreen and Chapter 18.30 of the Municipal Code, which contains the Green Building Standards Code. The Project would also use modern appliances and equipment, in accordance with the 2006 Appliance Efficiency Regulations (CCR Title 20, Sections 1601 through 1608). Per these requirements, the Project would use recycled construction materials; environmentally sustainable building materials; designs that reduce the amount of energy used in building heating and cooling systems, compared to conventionally built structures; and landscaping that incorporates water-efficient irrigation systems, all of which would conserve energy. In addition, the City's 2040 General Plan contains goals, policies, and programs that require local planning and development decisions to consider impacts on energy resources. The Project would adhere to general plan goals, policies, and programs, which would serve to increase energy conservation and minimize potential impacts associated with energy use. As part of the City's approval process, the Project would be required to comply with existing regulations, including general plan policies and zoning regulations that promote energy conservation and efficiency by requiring sustainable building practices and reducing automobile dependency. Furthermore, implementation of the City's

CAP and compliance with CALGreen, as well as other applicable state and local energy efficiency measures, would result in energy conservation and savings. Refer to Section VIII, *Greenhouse Gas Emissions,* for additional discussion on the Project's consistency with regulations related to sustainability. The Project would result in a ***less-than-significant impact*** related to conflicting with a state or local plan for renewable energy and energy efficiency.

VII. Geology, Soils, and Paleontological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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.				X
2. Strong seismic ground shaking?				X
3. Seismic-related ground failure, including liquefaction?			X	
4. Landslides?				X
b. Result in substantial soil erosion or the loss of topsoil?			X	
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?				X
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

Setting

Geology and Soils

Burlingame is in the Coast Ranges geomorphic province, in eastern San Mateo County, and adjacent to San Francisco Bay.[53] The Bay Area is considered one of the most seismically active areas in the country and is subject to the effects of earthquakes. The city of Burlingame, as well as the Project site, is situated in the central portion of the San Francisco Peninsula, at the eastern edge of a system of ridges, valleys, and hills that lie east of the northwesterly-trending rift valley of the active San Andreas fault. The San Andreas fault is a major fault that traverses the Bay Area, extending from the Gulf of California in Mexico to Cape Mendocino in California. Basement rock west of the San Andreas fault is generally granite; to the east, it is generally composed of marine sedimentary, submarine volcanic, and metamorphic rocks of the Franciscan Complex, both of Jurassic to Cretaceous age. Overlying the basement rocks are Cretaceous marine and Tertiary marine and non-marine sedimentary rock, with some continental volcanic rock. These Cretaceous and Tertiary rocks, which have been extensively folded and faulted because of movement along the San Andreas fault system, are overlain with sediments of Quaternary age.

The Project site is approximately 8 feet above mean sea level (msl),[54] and the topography is flat. The site is underlain by artificial fill placed over a historic marsh. The fill varies from clayey sand to sandy clay, both with variable gravel content with a fill thickness ranging from approximately 5 to 8 feet. The fill is underlain by marine deposits of highly plastic and compressible clay, known locally as Bay Mud. The upper few feet of the Bay Mud, referred to as crust, is over consolidated and stiffer than the underlying Bay Mud due to desiccation and tidal fluctuations that occurred prior to placement of the current fill. Below the crust, the Bay Mud is typically soft to medium stiff. The fill underlain by Bay Mud extends to approximately 33 feet below ground surface (bgs). Groundwater was encountered at depths as low as 3.3-feet bgs.[55] Actual groundwater levels fluctuate seasonally with variations in rainfall, temperature, and other factors.

As stated previously, the Project site is in an area that is subject to earthquakes. The Alquist-Priolo Earthquake Fault Zoning Act (1972) and the Seismic Hazards Mapping Act (1990) direct the State Geologist to delineate regulatory zones to help cities and counties prevent the construction of buildings for human occupancy on the surface trace of active faults. The Project site is not in a currently established State of California Earthquake Fault Zone.[56] Furthermore, no active or potentially active faults are known to pass directly beneath the site.[57] However, the Project site is near several active faults that are capable of generating large earthquakes.

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53 California Department of Conservation, California Geological Survey. 2002. *California Geomorphic Provinces* Note 36. Available: https://www.conservation.ca.gov/cgs/documents/publications/cgs-notes/CGS-Note-36.pdf. Accessed: September 13, 2023.

54 Roux Associates, Inc. 2022. Phase I Environmental Site Assessment, 1499 Old Bayshore Highway and 801 Mahler Road, Burlingame, San Mateo County, California. February 9. Prepared for King 1499 Bayshore Owner LLC.

55 Rockridge Geotechnical. 2022. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation 1499 Old Bayshore Highway Burlingame, California. January 11.

56 California Geological Survey. n.d. *Earthquake Zones of Required Investigation*. Available: https://maps.conservation.ca.gov/cgs/eqzapp/app/. Accessed: September 13, 2023.

57 Rockridge Geotechnical. 2022. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation 1499 Old Bayshore Highway Burlingame, California. January 11.

Table 9 shows the regional faults, the distance from the Project site, and the probability of an earthquake with a magnitude greater than 6.7 within 30 years.

Table 9. Regional Faults

Fault Name	Approximate Distance to Project Site (miles)	Maximum Earthquake Magnitude
San Andreas (Peninsula)	2.6	7.4
San Gregorio	9.3	7.4
Hayward (North)	16.2	6.9
Hayward (South)	15.5	7.0
Monte Vista-Shannon	8.7	7.14
San Andreas (North Coast)	26.1	7.5
Calaveras (North)	24.2	6.7
Butano	19.9	6.9
Mount Diablo Thrust (North)	26.1	6.7
Mount Diablo Thrust	26.1	6.7
Zayante-Vergeles (Upper)	28.6	7.5

Source: Rockridge Geotechnical. 2022. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation *1499 Old Bayshore Highway Burlingame, California*. January 11.

The Project site is mapped as having the potential for liquefaction.[58] However, because the potentially liquefiable layers within the underlying fill appear to be relatively thin, the potential for liquefaction-related settlement is minimal. The Project site is not subject to landslides.[59]

Paleontological Resources

Paleontological resources are fossilized remains, traces, or imprints of once-living organisms that have been preserved in rocks and sediments, providing evidence of past life on Earth. The Society of Vertebrate Paleontology states that significant paleontological resources include fossils of identifiable vertebrate fossils, large or small, and uncommon invertebrate, plant, and trace fossils.[60] The potential for an area to yield significant paleontological resources depends on the geologic age and origin of the underlying rock.

No known paleontological resources have been recorded at the Project site.[61] However, paleontological resources have been recovered from multiple locations in the San Francisco Bay Area, including inland San Mateo County.[62] As mentioned above, the site is underlain by artificial fill

58 California Geological Survey. 2018. *Earthquake Zones of Required Investigation (CGS Liquefaction Zones Operational Layer)*. Available: https://maps.conservation.ca.gov/cgs/eqzapp/app/. Accessed: September 13, 2023.

59 Rockridge Geotechnical. 2022. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation 1499 Old Bayshore Highway Burlingame, California. January 11.

60 Society of Vertebrate Paleontology. 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources.* Available: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf. Accessed: September 14, 2023.

61 University of California Museum of Paleontology. 2020. *Specimen Search*. Available: https://ucmpdb.berkeley.edu/. Accessed: September 14, 2023.

62 ibid.

and marine deposits known locally as Bay Mud, which is underlain by alluvium and aged marine deposits that have the potential for paleontological resources. Artificial fill may contain fossils; however, because these have been moved from their original site of deposition, they have lost their original paleontological significance.

Discussion

a.1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 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.

The Project site is not within an earthquake fault zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act (1972) or the Seismic Hazards Mapping Act (1990), and no known fault or potentially active fault exists within the Project site.[63] In seismically active areas, such as the Bay Area, the remote possibility exists for future faulting in areas where faults were not previously mapped; however, the likelihood of surface fault rupture as a result of seismic activity at the Project site is low. Therefore, the Project would not result in the risk of loss, injury, or death involving rupture of a known earthquake fault, and there would be ***no impact.***

a.2. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?

The city of Burlingame lies close to historically active faults that can generate strong earthquakes. Development within the City is likely to be subject to strong seismic ground shaking. This includes development at the Project site. The intensity of earthquake ground motions would depend on the characteristics of the generating fault, distance to the fault and rupture zone, earthquake magnitude, earthquake duration, and site-specific geologic conditions. The San Andreas fault is the closest active fault to the Project site, approximately 2.6 miles to the west. This fault is estimated to have a 22% chance of producing an earthquake with a magnitude greater than 6.7 sometime within the next 30 years.[64] Accordingly, implementation of the Project would expose people and structures to strong seismic ground shaking in case of earthquake. However, according to Municipal Code Title 18, Chapter 8.005 and Chapter 08.105, Burlingame has adopted the 2022 California Building Standards Code (CBSC), Part 2, Volumes 1 and 2. The code requires a design-level geotechnical study to be performed for structures that would be built in areas with known geological hazards, including seismic hazards. Implementation of the recommendations provided in the design-level Project geotechnical study would minimize risks to public safety. Therefore, the Project would not result in the risk of loss, injury, or death involving strong seismic ground shaking, and there would be ***no impact.***

63 California Geological Survey. n.d. *Earthquake Zones of Required Investigation*. Available: https://maps.conservation.ca.gov/cgs/eqzapp/app/. Accessed: September 13, 2023.

64 United States Geological Survey. n.d. Earthquake Outlook for the San Francisco Bay Region 2014-2043. Prepared by Brad T. Aagaard, James Luke Blair, John Boatwright, Susan H. Garcia Ruth A. Harris, Andrew J. Michael, David P. Schwartz, and Jeanne S. DiLeo. Available: https://pubs.usgs.gov/fs/2016/3020/fs20163020.pdf. Accessed: November 6, 2023.

a.3. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

The city of Burlingame lies close to historically active faults that can generate strong earthquakes. As explained under *Setting*, the Project site is mapped as having the potential for liquefaction.[65] The Project could exacerbate risks related to liquefaction. For example, the weight of structures constructed as part of the Project on liquefiable soils would make displacement more likely. The geotechnical report notes that the Project site is underlain by thin medium dense sand layers in the fill and alluvium that are susceptible to liquefaction during a major earthquake. Ground settlement associated with liquefaction is estimated on the order of 0.5 to 0.75 of an inch. However, because the potentially liquefiable layers within the underlying fill appear to be relatively thin, the potential for liquefaction-related settlement is minimal.[66]

According to Municipal Code Title 18, Chapters 8.005 and 08.105, Burlingame has adopted the 2022 CBSC, Part 2, Volumes 1 and 2. The code requires a design-level geotechnical study to be performed for structures that would be built in areas with known geological hazards. With implementation of the recommendations provided in the design-level Project geotechnical study, impacts related to seismic-related ground failure including liquefaction would be ***less than significant***.

a.4. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

The Project site is not within a mapped landslide zone or a designated earthquake-induced landslide zone, as shown on the California Geological Survey seismic hazard zone map for the area. The Project site is relatively flat, with minor grade variations for drainage purposes. Therefore, the Project would not exacerbate landslide risks. There would be ***no impact*** related to landslide hazards.

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

The Project site is currently developed and occupied with two (2) two-story office buildings with surface parking and a concrete tilt-up warehouse building with surface parking. One two-story building would be demolished prior to Project construction to support temporary worker parking for a nearby project, and the two remaining buildings and asphalt parking lots would be demolished and removed as part of the Project. Construction activities would be required to comply with the provisions in Appendix J of the 2022 California Building Code with respect to grading, excavating, and earthwork. In addition, because more than 1 acre of soil would be affected by the Project, the Project would be subject to a Construction General Permit, which stipulates erosion control requirements. These requirements include preparation and implementation of a SWPPP) that contains BMPs. The purpose of the SWPPP is to identify potential sediment sources and prescribe BMPs to ensure that potential adverse erosion impacts would not occur during construction. Implementation of the SWPPP with BMPs would control stormwater runoff emanating from the construction site. BMPs may include damp street sweeping; appropriate covers, drains, and storage precautions for outdoor material storage areas; and temporary cover for disturbed surfaces, which would help to minimize erosion. Furthermore, Project conformance to City grading standards and

65 California Geological Survey. 2018. *Earthquake Zones of Required Investigation (CGS Liquefaction Zones Operational Layer)*. Available: https://maps.conservation.ca.gov/cgs/eqzapp/app/. Accessed: September 13, 2023.

66 Rockridge Geotechnical. 2022. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation 1499 Old Bayshore Highway Burlingame, California. January 11.

the San Mateo County Stormwater Management Plan would prevent substantial erosion as a result of construction and implementation. Therefore, the impact would be ***less than significant***.

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

Liquefaction occurs when saturated soils lose strength and stiffness with applied stress, such as during an earthquake. The lack of cohesion causes solid soil to behave like a liquid, resulting in ground deformation. Ground deformation can take on many forms, including, but not limited to, flow failure, lateral spreading, lowering of the ground surface, ground settlement, loss of bearing strength, ground fissures, and sand boils. Liquefaction within subsurface layers, which can occur during ground shaking associated with an earthquake, could result in ground settlement. The soil types most susceptible to liquefaction are loose to moderately dense, saturated non-cohesive soils with poor drainage, such as sands and silts with interbedded or capping layers of relatively low permeability. Lateral spreading typically occurs on gentle slopes with a rapid fluid-like flow. It can also occur when the potential exists for liquefaction in underlying saturated soils.

The Project site is in an area with the potential for liquefaction.[67] The analysis conducted in the Preliminary Geotechnical Investigation suggests that up to 0.75-inch of ground surface settlement could result from liquefaction after a seismic event. However, because the potentially liquefiable layers within the underlying fill appear to be relatively thin, the potential for liquefaction-related settlement is minimal. In addition, the Project would be required to conform to the CBSC to withstand earthquakes and other soil hazards and implement all building design recommendations made by the Geotechnical Engineer. With incorporation of code requirements and recommendations made by the Geotechnical Engineer, which the City requires as conditions of approval, the potential for liquefaction at the Project site would be ***less than significant***.

According to the U.S. Geological Survey (USGS), subsidence is the gradual settling or sinking of the surface due to the movement of subsurface materials. The main cause of subsidence in California is excessive groundwater pumping;[68] however, subsidence can also be caused by peat loss and oil extraction. Burlingame has not experienced subsidence as a result of the aforementioned factors, either historically or recently; therefore, the potential for subsidence at the Project site is low.[69] Soil collapse can occur after wetting collapsible soils, load application, or some combination of both.[70] Collapsible soils, which are generally found in arid or semi-arid regions, are low-density silty soils with large air spaces or gaps between the grains of soil.[71] Because the Project site is underlain by

67 California Geological Survey. 2018. *Earthquake Zones of Required Investigation (CGS Liquefaction Zones Operational Layer)*. Available: https://maps.conservation.ca.gov/cgs/eqzapp/app/. Accessed: September 13, 2023.

68 U.S. Geological Survey. n.d. *Land Subsidence in California*. Available: https://www.usgs.gov/centers/ca-water-ls. Accessed: September 15, 2023.

69 ibid.

70 U.S. Department of the Interior. 1992. *Characteristics and Problems of Collapsible Soils*. Bureau of Reclamation, Denver Office, Research and Laboratory Services Division, Materials Engineering Branch. Available: https://www.usbr.gov/tsc/techreferences/rec/R9202.pdf. Accessed: September 15, 2023.

71 Colorado Geological Survey. 2018. *Collapsible Soils*. Available: https://coloradogeologicalsurvey.org/2018/28848-collapsible-soils/. Accessed: September 15, 2023.

marine deposits of highly plastic and compressible clay known as Bay Mud and relatively shallow groundwater,[72] the potential for soil collapse at the site is moderate.

As identified by the California Geological Survey, the Project site is not within a landslide hazard zone; therefore, it would not result in onsite or offsite landslides. Although the Project site has the potential for liquefaction, due to the relatively flat grades and thin, discontinuous natural of potentially liquifiable layers underlying the site, the risk of lateral spreading is low.[73] Furthermore, there are no open faces or slopes near the Project site. According to Municipal Code Title 18, Chapter 8.005 and Chapter 08.105, the City has adopted the 2022 CBSC, Part 2, Volumes 1 and 2. The code requires a design-level geotechnical study to be performed for structures that would be built in areas with known geological hazards. With implementation of the Geotechnical Engineer's recommendations provided in the design-level Project geotechnical study, which the City requires as conditions of approval, the Project would be designed to withstand soil hazards at the site. The impact would be ***less than significant***.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils are characterized by their ability to undergo significant volume changes (i.e., shrink and swell) with variations in moisture content. Expansive soils are typically very fine grained and have a high to very high percentage of clay. They can damage structures and buried utilities and increase maintenance requirements.

The Project site is underlain by artificial fill, the expansive properties of which are unknown but should be assumed to be expansive. Although the Project site would be raised, deep foundations may be required for elevator pits. Excavation depths of approximately 15 feet are anticipated to construct the basement level and foundation.[74] Deep foundations would be supported on piles that would extend through the Bay Mud deposits into the alluvium that underlies the Bay Mud. Although the Bay Mud is known to have expansive properties, it is submerged and would not undergo the wetting and drying cycles that cause expansion and contraction. In addition, recommendations made in the field by the Geotechnical Engineer would be followed.

According to Municipal Code Title 18, Chapter 8.005 and Chapter 089.105, the City has adopted the 2022 CBSC, Part 2, Volumes 1 and 2. The code requires a design-level geotechnical study to be performed for structures that would be built in areas with known geological hazards. With implementation of the recommendations provided in the design-level Project geotechnical study, impacts related to expansive soils would be ***less than significant***.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?

The Project site would dispose of wastewater by using the existing wastewater infrastructure operated by the City. No aspect of the Project would entail any new use of septic tanks or alternative

72 Rockridge Geotechnical. 2022. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation 1499 Old Bayshore Highway Burlingame, California. January 11.

73 ibid.

74 Rockridge Geotechnical. 2022. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation 1499 Old Bayshore Highway Burlingame, California. January 11.

wastewater disposal systems. Therefore, there would be ***no impact*** related to the use of septic tanks or alternative wastewater disposal systems.

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

The artificial fill under the Project site extends to depths of 5 to 8 feet. Although the Project site would be raised, there would be an overall excavation depth of approximately 13 feet anticipated to construct the basement level and foundation.[75] If excavation disturbs native sediments, it has the potential to disturb paleontological resources. Such disturbance would constitute a significant impact. Mitigation Measure GEO-1 would require all work to stop if a paleontological resource is discovered and a professional paleontologist to evaluate the resource and implement protective measures, as needed. The impact would be ***less than significant with mitigation***.

Mitigation Measure GEO-1: Stop Work in Case of Discovery of Paleontological Resources.

Discovery of a paleontological specimen during any phase of the Project shall result in work stoppage in the vicinity of the find until it can be evaluated by a professional paleontologist. Should loss or damage be detected, additional protective measures or further action (e.g., resource removal), as determined by the professional paleontologist, shall be implemented to mitigate the impact prior to the continuation of work.

75 ibid.

VIII. Greenhouse Gas Emissions

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

Setting

Global Climate Change

The process known as the greenhouse effect keeps the atmosphere near Earth's surface warm enough for the successful habitation of humans and other life forms. The greenhouse effect is created by sunlight that passes through the atmosphere. Some of the sunlight striking Earth is absorbed and converted to heat, which warms the surface. The surface emits a portion of this heat as infrared radiation, some of which is re-emitted toward the atmosphere by greenhouse gases (GHGs). Human activities that generate GHGs increase the amount of infrared radiation absorbed by the atmosphere, thereby enhancing the greenhouse effect and amplifying the warming of Earth.

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution.[76] Rising atmospheric concentrations of GHGs, in excess of natural levels, have resulted in increasing global surface temperatures—a process commonly referred to as global warming. Higher global surface temperatures have, in turn, resulted in changes to Earth's climate system, including increases in ocean temperature and acidity, reduced sea ice, variable precipitation, and increases in the frequency and intensity of extreme weather events.[77] Large-scale changes to Earth's system are collectively referred to as *climate change.*

The Intergovernmental Panel on Climate Change (IPCC) was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change, its potential impacts, and options for adaptation and mitigation. The IPCC estimates that human-induced warming reached approximately 1 degree Celsius (°C) above pre-industrial levels in 2017 and is increasing at a rate of 0.2°C per decade. Under the current nationally determined contributions of mitigation from each country until 2030, global warming is expected to rise to 3°C

76 IPCC. 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Available: https://www.ipcc.ch/site/assets/uploads/2018/05/ar4_wg1_full_report-1.pdf. Accessed: October 4, 2023.

77 IPCC. 2018. *Global Warming of 1.5°C. Contribution of Working Group I, II, and III (Summary for Policy Makers)*. Available: https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SPM_version_report_LR.pdf. Accessed: October 4, 2023.

by 2100 and continue afterward.[78] Large increases in global temperatures could have substantial adverse effects on the natural and human environments in California and worldwide.

Greenhouse Gases

The principle anthropogenic (human-made) GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds, including sulfur hexafluoride, hydrofluorocarbons (HFCs), and perfluorocarbons. The primary GHGs that would be emitted by Project-related construction and operations include CO_2, CH_4, and N_2O. The principal characteristics of these pollutants are discussed below.

- **Carbon dioxide** enters the atmosphere through the combustion of fossil fuel (i.e., oil, natural gas, coal), solid waste decomposition, plant and animal respiration, and chemical reactions (e.g., from manufacturing cement). CO_2 is also removed from the atmosphere, or *sequestered*, when it is absorbed by plants as part of the biological carbon cycle.
- **Methane** is emitted during the production and transport of coal, natural gas, and oil. CH_4 emissions also result from livestock and agricultural practices as well as the anaerobic decay of organic waste in municipal solid waste landfills.
- **Nitrous oxide** is emitted by agricultural and industrial activities as well as the combustion of fossil fuels and solid waste.

Methods have been set forth to describe emissions of GHGs in terms of a single gas to simplify reporting and analysis. The most commonly accepted method for comparing GHG emissions is the global warming potential (GWP) methodology defined in IPCC reference documents. IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide equivalent (CO_2e), which compares the gas in question to that of the same mass of CO_2. By definition, CO_2 has a GWP of 1. Table 10 lists the global warming potential of CO_2, CH_4, and N_2O and their lifetimes in the atmosphere.

Table 10. Lifetimes and Global Warming Potentials of Key Greenhouse Gases

Greenhouse Gas	Global Warming Potential (100 years)	Lifetime (years)
Carbon Dioxide (CO_2)	1	—[a]
Methane (CH_4)	25	12
Nitrous Oxide (N_2O)	298	114

Source: CARB. 2020. *GHG Global Warming Potentials*. Available: https://ww2.arb.ca.gov/ghg-gwps. Accessed: October 4, 2023.

18. [a] No lifetime (years) for carbon dioxide was presented by CARB.

78 IPCC. 2018. *Global Warming of 1.5°C. Contribution of Working Group I, II, and III (Summary for Policy Makers)*. Available: https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SPM_version_report_LR.pdf. Accessed: October 4, 2023.

Greenhouse Gas Reporting

A GHG inventory is a quantification of all GHG emissions and sinks within a selected physical and/or economic boundary.[79] GHG inventories can be performed on a large scale (e.g., for global and national entities) or on a small scale (e.g., for a building or person). Several agencies have developed emissions inventories, which provide comprehensive accounts of total GHG emissions at varying scales, and tools for quantifying emissions from specific sources. Table 11 shows results of the most current emissions inventories at the international, national, state, regional, and city levels, as quantified by IPCC, EPA, CARB, BAAQMD, and the City, respectively.

Table 11. Global, National, State, and Local Greenhouse Gas Emissions Inventories

Emissions Inventory	CO_2e (metric tons)
2017 IPCC Global GHG Emissions Inventory	53,500,000,000
2021 EPA National GHG Emissions Inventory	6,340,200,000
2020 CARB State GHG Emissions Inventory	369,200,000
2011 BAAQMD GHG Emissions Inventory	86,600,000
2015 City of Burlingame GHG Inventory	242,489

Sources:

IPCC. 2018. *Emissions Gap Report 2018*. Available: https://www.ipcc.ch/site/assets/uploads/2018/12/UNEP-1.pdf. Accessed: October 4, 2023.

EPA. 2023. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021; Executive Summary*. Available: https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Chapter-Executive-Summary.pdf. Accessed: October 4, 2023.

CARB. 2022. *Current California GHG Emission Inventory Data*. Available: https://ww2.arb.ca.gov/ghg-inventory-data. Accessed: October 4, 2023.

BAAQMD. 2011. *Bay Area Emissions Inventory Summary Report: Greenhouse Gases Base Year 2011*. Updated: January 2015. Available: http://www.baaqmd.gov/~/media/files/planning-and-research/emission-inventory/by2011_ghgsummary.pdf. Accessed: October 4, 2023.

City of Burlingame. 2019. *Burlingame General Plan*. November. Available: https://cms6.revize.com/revize/burlingamecity/document_center/Planning/General%20and%20Specific%20Plans/BurlingameGP_Final_Nov2019_COMPLETE%20DOCUMENT.pdf. Accessed: October 4, 2023.

GHG = greenhouse gas; CO2e = carbon dioxide equivalent.

Regulatory Setting

California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this legislation establishes a broad framework for the state's long-term GHG reduction and climate change adaptation program. Of particular importance are Senate Bill (SB) 32 and Assembly Bill (AB) 1279, which outline the state's GHG reduction goals of achieving a 40% reduction below 1990 emissions levels by 2030 and net zero GHG emissions (i.e., reach a balance between the GHGs emitted and removed from the atmosphere) no later than 2045. AB 1279 also mandates an 85% reduction in statewide GHG emissions (from 1990 levels) by 2045. The *2017 Climate Change Scoping Plan* and the *2022 Scoping Plan Update* provide frameworks for achieving

[79] A *GHG sink* is a process, activity, or mechanism that removes a GHG from the atmosphere.

the 2030 and 2045 reduction targets, respectively, leveraging and enhancing many efforts and programs already adopted by the state.[80, 81]

The following sections describe regional and local regulations relevant to the Project.

Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) is the metropolitan planning organization for the nine counties that make up the Bay Area and SFBAAB, including the city of Burlingame. In October 2021, MTC and the Association of Bay Area Governments (ABAG) adopted *Plan Bay Area 2050*, the latest regional transportation plan/sustainable communities strategy (RTP/SCS) for the SFBAAB. *Plan Bay Area 2050* incorporates emission reduction targets updated by CARB in 2018 pursuant to SB 375 and carries forward many of the development and funding strategies of earlier plans.[82]

Bay Area Air Quality Management District

BAAQMD is the primary agency responsible for addressing air quality concerns in the Bay Area, including San Mateo County. BAAQMD recommends methods for analyzing project-related GHGs in California Environmental Quality Act (CEQA) analyses, as well as multiple GHG reduction measures for land use development projects.

BAAQMD formally adopted new CEQA GHG thresholds and released its *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans* (BAAQMD Justification Report) in April 2022.[83] This updates the CEQA GHG thresholds from the 2017 CEQA Guidelines, which were not consistent with the statewide GHG target established by SB 32. The new CEQA GHG thresholds are presented in Table 12.

BAAQMD published the most recent version of the CEQA Air Quality Guidelines in April 2023 (BAAQMD CEQA Guidelines). BAAQMD's CEQA Guidelines include guidance for evaluating plan- and project-level air quality and climate impacts, as well as best practices for centering environmental justice, health, and equity thresholds for evaluating a project's impact on air quality.[84] The evidence provided in the BAAQMD Justification Report underpins the air district's updated GHG thresholds and recommendations for assessing project-level climate impacts provided in the BAAQMD CEQA Guidelines. This analysis was prepared consistent with guidance and recommendations from the most recent BAAQMD CEQA Guidelines.

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80 CARB. 2017. *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target*. November. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed: October 4, 2023.

81 CARB. 2022. *2022 Scoping Plan Update*. November. Available: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf. Accessed: October 4, 2023.

82 MTC/ABAG. 2021. *Plan Bay Area 2050*. Adopted: October 21. Available: https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021.pdf. Accessed: October 4, 2023.

83 BAAQMD. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en. Accessed: October 4, 2023.

84 BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

Construction GHG Emissions

The BAAQMD's CEQA Guidelines or Justification Report do not identify a GHG emissions threshold for construction-related emissions.[85, 86] Nonetheless, BAAQMD's BAAQMD CEQA Guidelines recommend the quantification and disclosure of construction GHG emissions. Even though the significance of construction GHG emissions is not determined, the BAAQMD CEQA Guidelines provide BMPs that projects should incorporate to reduce construction GHG emissions.[87]

Operational GHG Emissions

According to the Justification Report, BAAQMD recommends that the evaluation of land-use projects focus on a project's impact on California's efforts to meet the state's long-term climate goals. If a project would contribute its "fair share"[88] of what will be required to achieve those long-term climate goals, then a reviewing agency can find that the impact would not be significant because the project would help to solve the problem of global climate change.[89] Applying this approach, BAAQMD has found that a new land use development project being built today needs to incorporate the design elements provided in Table 12 to do its fair share toward meeting the SB 32 2030 target and the goal of carbon neutrality by 2045.

85 BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

86 BAAQMD. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en. Accessed: October 4, 2023.

87 BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

88 The BAAQMD defines "fair share" as the design elements that need to be incorporated into a project to lay the foundation for achieving carbon neutrality by 2045. These design elements are elements that the project has influence or control over. For example, becoming carbon neutral by 2045 will require California's electrical power generators to shift to 100-percent carbon-free energy resources, which is not something that can be controlled through the design of new land use projects, and would not be a part of a project's fair share. Other sources that would not be part of the "fair share" is vehicle fleet mix or indirect offsite emissions (e.g., methane emissions from wastewater or solid waste).

89 BAAQMD. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en. Accessed: October 4, 2023.

Table 12. Bay Area Air Quality Management District Greenhouse Gas Thresholds for Land Use Projects

Thresholds for Land Use Projects (Must Include A or B)
A. Projects must include, at a minimum, the following project design elements: 1. Buildings a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development). b. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines. 2. Transportation a. Achieve compliance with electric vehicle requirements in the most recently adopted version of CALGreen Tier 2. b. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA: i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT
B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

Source: BAAQMD. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en. Accessed: October 4, 2023.

If a project is designed and built to incorporate the design elements listed in Table 12 (Threshold Option A) or is consistent with a local GHG reduction strategy under Section 15183.5 of the CEQA Guidelines (Threshold Option B), then it would contribute its portion of what is necessary to achieve California's long-term climate goals—its fair share—and would not make a cumulatively considerable contribution to global climate change. If the project does not incorporate these design elements and is not consistent with a local GHG reduction strategy, then it should be found to have a significant climate impact because it would hinder the state's efforts to address climate change.

City of Burlingame

ENVISION Burlingame General Plan

The ENVISION Burlingame General Plan, adopted in November 2019, includes policies to address issues related to GHG emissions through the year 2040.[90] The plan includes several goals and policies aimed at reducing GHG emissions.

City of Burlingame 2030 Climate Action Plan

The City of Burlingame 2030 CAP, adopted in 2019, is a comprehensive GHG emissions reduction strategy for achieving the City's fair share of statewide emissions reductions within the 2020 and

[90] City of Burlingame. 2019. *Burlingame General Plan*. November. Available: https://cms6.revize.com/revize/burlingamecity/document_center/Planning/General%20and%20Specific%20Plans/BurlingameGP_Final_Nov2019_COMPLETE%20DOCUMENT.pdf. Accessed: October 4, 2023.

2030 timeframe, consistent with AB 32 and SB 32.[91] The plan specifies feasible GHG emissions reduction measures for implementation on a project-by-project basis to achieve the City's GHG reduction targets through 2030. The CAP also forecasts annual GHG emissions and provides reduction targets for 2040 and 2050.

CEQA authorizes reliance on a previously approved GHG emissions reduction plan (e.g., a CAP) that was prepared as a "plan for the reduction of greenhouse gas emissions," per Section 15183.5 of the CEQA Guidelines. This section of the CEQA Guidelines establishes opportunities for CEQA tiering when projects are consistent with adopted GHG emissions reduction plans and their impacts can be determined to be less than significant, provided the GHG emissions reduction plans meet specific criteria established under CEQA Guidelines Section 15183.5. Because the City's CAP satisfies the tiering requirements established in CEQA Guidelines Section 15183.5, it can be used to determine the significance of an individual project's GHG emissions.

The CAP provides a consistency checklist application to ensure that development projects in the City are consistent with the plan and provide a streamlined review process for projects while undergoing CEQA review.

Discussion

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The City's CAP satisfies the tiering requirements established in Section 15183.5 of the CEQA Guidelines and can be used to determine the significance of an individual project's GHG emissions. Consistent with SB 32, the most recent update to the City's CAP specifies feasible GHG emissions reduction measures to achieve the City's GHG reduction targets through 2030. While the CAP forecasts annual GHG emissions and provides reduction targets for 2040 and 2050, it does not demonstrate achievement with longer-term goals for 2040 and 2050. As a result, this analysis evaluates the Project's consistency with the City's CAP to determine the significance of the Project's GHG emissions relative to the State's 2030 SB 32 climate target. As discussed above, the newly adopted BAAQMD land use Threshold Option A design elements were identified to ensure that projects meet their fair share to help the State meet its long-term climate goals, including both SB 32 and the 2045 net-zero goal (SB 1279). As a result, this analysis applies the BAAQMD land use Threshold Option A to evaluate the Project's GHG impacts relative to the State's longer-term carbon neutrality target.

Although the quantity of the Project-generated GHG emissions is not directly used to evaluate GHG impacts, annual emissions generated by Project construction and operation were estimated to provide a fully comprehensive assessment.

Construction

Project construction activities would include demolition, site preparation/grading, pile installation, foundations, building exterior, building interior, parking structure pour sequence, and site finishes. These activities would require the operation of diesel-fueled offroad construction equipment and

[91] City of Burlingame. 2019. *2030 Climate Action Plan Update*. August 28. Available: https://cms6.revize.com/revize/burlingamecity/document_center/Sustainability/CAP/Climate%20Action%20Plan_FINAL.pdf#page=33. Accessed: October 4, 2023.

on-road vehicles, including haul trucks for demolition debris removal and soil hauling, vendor trucks for deliveries, and employee vehicles. Offroad equipment and on-road vehicles would generate exhaust emissions during the construction period. Construction GHG emissions from each source vary substantially depending on the specific construction phase, daily construction operations, types of equipment, and number of personnel.

Short-term GHG emissions generated by Project construction were calculated using CalEEMod Version 2022.1, which uses vehicle emissions factors from CARB's EMFAC2021, as recommended by BAAQMD and other air districts in California.[92] Modeling was based on Project-specific information where available, including building types and sizes, expected construction phase durations, an equipment inventory, demolition and earthwork quantities, the number and length of employee, vendor, and haul truck trips, and the area to be graded or paved; and default values from CalEEMod, which are generated by the model based on a project's location and land use type. Detailed model assumptions, inputs, and output files for the calculations can be found in Appendix A.

Based on modeling conducted with CalEEMod, it is estimated that Project-related construction would generate approximately 2,776 $MTCO_2e$ over the construction period (2024–2026).

As noted, BAAQMD has not established a quantitative threshold for assessing construction GHG emissions as the emissions are temporary and variable.[93] Thus, the significance of the Project's GHG impact is determined based on the potential for Project operation to generate GHG emissions. Nonetheless, as described in Chapter 2, *Introduction/Project Description*, the Project applicant has indicated that it will incorporate the following BMPs to align with BAAQMD recommendations for reducing GHG emissions from construction.

- Use diesel-fueled off-road construction equipment equipped with a mix of EPA Tier 4 Final, Tier 4 Interim and Tier 3 compliant engines.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 5 minutes (A 5-minute limit is required by the state airborne toxics control measure [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and develop an enforceable mechanism to monitor idling time to ensure compliance with this measure.
- Prohibit off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day on average.
- Require all construction equipment to be maintained and properly tuned in accordance with manufacturer's specifications. Equipment should be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Where grid power is available, prohibit portable diesel engines and provide electrical hook ups for electric construction tools, such as saws, drills, and compressors, and use electric tools whenever feasible.

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92 CAPCOA. 2022. *California Emissions Estimator Model User Guide.* April. Available: https://caleemod.com/documents/user-guide/CalEEMod_User_Guide_v2022.1.pdf. Accessed: October 4, 2023.

93 BAAQMD. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: October 4, 2023.

- Encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking to construction workers.
- Reduce electricity use in the construction office by using LED bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.
- Minimize energy used during site preparation by deconstructing existing structures to the greatest extent feasible.
- Recycle or salvage nonhazardous construction and demolition debris, with a goal of recycling at least 15% more by weight than the diversion requirement in Title 24.
- Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials and based on volume for roadway, parking lot, sidewalk and curb materials).
- Develop a plan to efficiently use water for adequate dust control since substantial amounts of energy can be consumed during the pumping of water.
- Include all requirements in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant on- or off-road construction equipment for use prior to any ground-disturbing and construction activities.

Operation

During operations, the largest source of GHG emissions would be motor vehicles traveling to and from the Project site. These emissions were estimated using traffic data provided by Kittelson & Associates and CalEEMod, which uses vehicle emissions factors from CARB's EMFAC2021. The traffic data was entered into the mobile-source module of CalEEMod to estimate GHG emissions resulting from Project-related vehicle trips.

GHG emissions associated with consumption of natural gas were assumed to be zero, as the Project would not use natural gas on site. For the Project's electricity consumption, the default CalEEMod values were adjusted to reflect the Project's increased electricity consumption from its electrified end uses, consistent with CAPCOA methodology.[94] Carbon intensity factors for Peninsula Clean Energy (PCE), which would supply electricity to the Project site, are included in CalEEMod for multiple years, and the PCE GHG intensity factors used to model emissions represent the first year of full buildout (2026). As PCE's electricity products will be carbon-free in 2021, the corresponding GHG intensity factors are zero, so the Project's electricity consumption would not be a source of GHG emissions.[95]

Project-specific water use rates were obtained from the *Water Supply Assessment for 1499 Old Bayshore Highway*, prepared by EKI Environment & Water, Inc. and inputted into CalEEMod to estimate emissions from water use (Appendix D). GHG emissions associated with solid waste generation, landscape maintenance, and refrigerant use were estimated using default values within

94 CAPCOA. 2021. *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. December. Available: https://www.caleemod.com/documents/handbook/full_handbook.pdf. Accessed: October 4, 2023.

95 Peninsula Clean Energy. n.d. *Strategic Plan 2020–2025*. Available: https://www.peninsulacleanenergy.com/wp-content/uploads/2020/06/PCE-Strategic-Guide-Online-W.pdf. Accessed: October 4, 2023.

the corresponding modules of CalEEMod. Detailed model assumptions, inputs, and output files can be found in Appendix A.

Project operation is expected to generate the highest quantity of annual operational emissions in the first year of full buildout (2026).[96] Table 13 shows the estimated annual GHG emissions associated with Project operation in 2026. As previously noted, GHG emissions associated with on-site consumption of natural gas were assumed to be zero, as the Project would not use natural gas on site.

Table 13. Operational Greenhouse Emissions by Sector for 2026 (MT CO_2e)

Emissions Source	Annual GHG Emissions [a] (MT CO_2e)
Mobile Sources	3,306
Area Sources	8
Energy Use	967
Water Use	29
Solid Waste Generation	29
Refrigerants	1
Stationary Sources	152
Total Operational GHG Emissions	4,492

Source: Appendix A.
MT CO_2e = megatons of carbon dioxide equivalent
[a] Values may not sum due to rounding.

As shown in Table 13, the Project would generate approximately 4,492 MT CO_2e during its first year of full buildout. As noted, these emissions quantities are not directly used to evaluate GHG impacts but are included here for informational purposes. The following sections discuss the Project's consistency with the City's CAP and BAAQMD land use thresholds, used to evaluate the significance of the Project's operational GHG impacts.

City of Burlingame 2030 Climate Action Plan

As discussed above, this analysis evaluates the Project's consistency with the City's CAP to determine the significance of the Project's GHG emissions relative to the State's 2030 SB 32 climate target. The *City of Burlingame Climate Action Plan Consistency Checklist for New Development* outlines CAP actions that are applicable to new development and can be used to demonstrate conformance with the CAP (CAP Checklist).[97] The CAP Checklist was completed for the Project based on information provided by the Project applicant and can be found in Appendix A. As shown in the CAP Checklist completed for the Project, the Project would be consistent with all required and applicable measures. The 2030 GHG reduction target in the City's CAP is consistent with the GHG reduction goal of SB 32; therefore, because the Project is consistent with the City's CAP, it is also consistent with the GHG reduction goals of SB 32. As noted above, the City's CAP satisfies the tiering requirements established in Section 15183.5 of the CEQA Guidelines, and BAAQMD defines consistency with a GHG reduction strategy (i.e., a CAP) as an option for evaluating project-level significance (Option B from Table 12). As a result, the Project's consistency with the SB 32 goal

96 Emissions in subsequent years would continually decrease, as the statewide vehicle fleet transitions to new, lower-carbon emitting vehicles; thus, 2026 represents a worst-case year.

97 City of Burlingame. n.d. *City of Burlingame Climate Action Plan Consistency Checklist for New Development*. Available: https://cms6.revize.com/revize/burlingamecity/CAP%20Checklist.pdf. Accessed: October 4, 2023.

indicates that the Project would not generate GHG emissions that have a significant impact on the environment. The Project's GHG impact with respect to the State's near-term (2030) target would be ***less than significant***.

Bay Area Air Quality Management District Land Use Thresholds

This analysis evaluates the Project's consistency with the BAAQMD land use Threshold Option A to determine the significance of the Project's GHG emissions with respect to the State's 2045 carbon neutrality target, because the CAP does not demonstrate achievement with the longer-term GHG reduction goals for 2040 or 2050. The Project's consistency with these requirements is discussed in Table 14.

Table 14. Project Consistency With the Bay Area Air Quality Management District Greenhouse Gas Land Use Thresholds

BAAQMD Threshold	Project Consistency
Sector – Buildings	
a) The project will not include natural gas appliances or natural gas plumbing (in either residential and nonresidential development)	**Consistent.** As part of the Project design, the Project would not include natural gas appliances or natural gas plumbing. As such, the Project would be consistent with this BAAQMD requirement.
b) The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(2) and Section 15126.2(b) of the State CEQA Guidelines.	**Consistent.** As determined in Chapter VI. *Energy,* the Project was found not to result in wasteful, inefficient, or unnecessary consumption of energy resources. Furthermore, the Project would include onsite solar power generation, thereby offsetting a portion of the Project's electricity consumption. In addition, the Project would be designed to achieve LEED Gold certification, which includes requirements related to energy efficiency and conservation. As such, the Project would be consistent with this BAAQMD requirement.
Sector – Transportation	
c) Achieve compliance with electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.	**Consistent.** For the purposes of evaluating GHG impacts, the Project is compared to the 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen) section 5.106.5.3 electric vehicle (EV) charging requirements for new nonresidential development. For nonresidential projects, CALGreen Tier 2 requires 45% of parking spaces to be EV Capable and 33% of EV Capable parking to be equipped with Electric Vehicle Supply Equipment (EVSE). The Project would comply with the City's reach code and exceed CALGreen Tier 2 EV requirements by providing 192 Level 2 EV Capable parking spaces and 128 EV charging stations (EVCS)[98] with Level 2 EV Ready spaces. Thus, 50% of the 639 total provided stalls would be EV Capable (or EV Ready, which involves more stringent infrastructure requirements), and 40% of the EV Capable or EV Ready spaces would be provided with EVSE. As such, the Project would be consistent with this BAAQMD requirement.

[98] Per the City's Reach Code, *EVCS* refers to a parking space that includes installation of electric vehicle supply equipment (EVSE) at an EV Ready space.

BAAQMD Threshold	Project Consistency
d) Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT Target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA: i. Residential projects: 15% below the existing VMT per capita. ii. Office projects: 15% below the existing VMT per employee iii. Retail projects: no net increase in existing VMT	**Consistent.** As described in the *Burlingame TIA Report* prepared for the Project and discussed in the *Transportation* analysis below, the Project would need to achieve at least a 19.4% reduction in average daily VMT per employee in order to meet the threshold of 15% below the existing Citywide average VMT per employee for office uses. The Project's TDM plan would achieve an estimated vehicle trip and VMT reduction of at least 19.4% VMT per employee, based on a review of the efficacy of the proposed TDM measures. As such, the Project would be consistent with this BAAQMD requirement.

Source: BAAQMD. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en. Accessed: October 4, 2023.
BAAQMD = Bay Area Air Quality Management District.

As demonstrated in Table 14, the Project would be consistent with all BAAQMD land use Threshold Option A design elements and would thus do its fair share towards meeting the 2045 net-zero goal. Therefore, the Project would result in a ***less-than-significant*** impact with respect to operational GHG emissions**.**

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

City of Burlingame 2030 Climate Action Plan

As discussed above, the *City of Burlingame Climate Action Plan Consistency Checklist for New Development* outlines CAP actions that are applicable to new development and can be used to demonstrate conformance with the CAP. The CAP Checklist was completed for the Project based on information provided by the Project applicant and can be found in Appendix A. As shown in the CAP Checklist completed for the Project, the Project would be consistent with all required and applicable measures. Therefore, the Project would not conflict with implementation of the City's CAP or attainment of local GHG reduction targets. This impact would be ***less than significant***.

California Senate Bill 375/Plan Bay Area 2050

Plan Bay Area 2050, the RTP/SCS for the San Francisco Bay Area, was prepared by MTC pursuant to the requirements of SB 375, as discussed in the *Regulatory Setting* section. *Plan Bay Area 2050* is a

state-mandated, integrated long-range transportation and land use plan that demonstrates reductions in GHG emissions from passenger cars and light-duty trucks.[99]

The Project would be consistent with the type and level of development incorporated in the *ENVISION Burlingame General Plan*, which is used to develop growth and development assumptions for the Plan Bay Area 2050. Furthermore, as described below in the *Transportation* analysis, the Project's TDM plan would achieve an estimated vehicle trip and VMT reduction of at least 19.4% VMT per employee, supporting efforts to reduce VMT and GHG emissions from passenger cars and light-duty trucks. Finally, the Project would redevelop a site within the existing urban growth boundary with new all-electric office/R&D buildings consistent with *Plan Bay Area 2050* strategy EN4, *Maintain Urban Growth Boundaries*. As the Project would support *Plan Bay Area 2050* efforts to reduce VMT and GHG emissions from passenger cars and light-duty trucks, and proposed land use types and sizes fit within the envelope of the uses assumed in *Plan Bay Area 2050*, the Project would not conflict with implementation of *Plan Bay Area 2050*. This impact would be ***less than significant***.

CARB 2022 Scoping Plan

As explained in the *Regulatory Setting* section, CARB's 2022 Scoping Plan outlines the main strategies for California to keep California on track to meet its SB 32 GHG reduction target of at least 40% below 1990 emissions by 2030, as well as to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85% below 1990 levels.[100] Regarding project-level GHG analyses, Appendix D to CARB's 2022 Scoping Plan, *Local Actions*, notes:

> when jurisdictions have a CEQA-qualified CAP, an individual project that complies with the strategies and actions within a CEQA-qualified CAP can tier and streamline its project-specific CEQA GHG analysis to make a determination 'that a project's incremental contribution to a cumulative [GHG] effect is not cumulatively considerable' (CEQA Guidelines Sections 15064.4 (b)(3) and 15183.5).[101]

Appendix D to CARB's 2022 Scoping Plan also notes that local governments should consider three priority areas, transportation electrification, VMT reduction, and building decarbonization, when preparing a CEQA-qualified CAP.

In line with this guidance, the City's CAP satisfies the tiering requirements established in Section 15183.5 of the CEQA Guidelines and can thus be used to determine the significance of an individual project's GHG emissions. Moreover, the CAP contains several measures related to transportation electrification, VMT reduction, and building decarbonization, such as those related to electric vehicle infrastructure, transportation demand management, and renewable energy. Given the City has adopted a CEQA-qualified CAP incorporating strategies within the three priority areas outlined in Appendix D to CARB's 2022 Scoping Plan, this analysis evaluates the Project's alignment with CARB's 2022 Scoping Plan based on its consistency with the City's CAP.

As described previously and shown in the CAP Checklist completed for the Project, provided as Appendix A, the Project would be consistent with all required and applicable measures, including

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99 CARB. 2018. *SB 375 Regional Greenhouse Gas Emissions Reduction Targets*. Approved: March 22, 2018. Available: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed: October 4, 2023.

100 CARB. 2022. *2022 Scoping Plan Update*. November. Available: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf. Accessed: October 4, 2023.

101 CARB. 2022. *2022 Scoping Plan Update: Appendix D Local Actions*. November. Available: https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf. Accessed: October 4, 2023.

those related to transportation electrification, VMT reduction, and building decarbonization. As a result, the Project would be consistent with the City's CAP, aligning with the GHG emissions reduction strategies outlined in CARB's 2022 Scoping Plan. As a result, the Project would not conflict with CARB's 2022 Scoping Plan. The Project's impact with respect to applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions would be ***less than significant***.

IX. Hazards and Hazardous Materials

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c.	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d.	Be located on a site that 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?				X
e.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?			X	
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?			X	

Setting

This setting discussion for hazards and hazardous materials is based on the Phase I and Phase II Environmental Site Assessments (ESAs) that were prepared for the Project site in 2022 by Roux Associates, Inc.[102] [103] Phase I and Phase II ESAs were prepared for both parcels within the proposed project site: the parcel containing 825 Mahler Road and the parcel containing 1499 Old Bayshore and 801 Mahler Road.

[102] Roux Associates, Inc. May 16, 2022. Phase I Environmental Site Assessment for 825 Mahler Road.

[103] Roux Associates, Inc. February 9, 2022. Phase I Environmental Site Assessment for 1499 Old Bayshore Highway and 801 Mahler Road.

The purpose of the Phase I ESAs was to assess the likelihood of contamination at the site as a result of either past or present land practices as well as the potential for future environmental contamination that may occur as a result of current conditions or operations or maintenance activities at either the Project site or properties adjoining the Project site. The Phase I ESAs did not identify any significant concerns associated with the Project site. One minor concern identified was associated with the suspected presence of asbestos-containing materials in on-site structures. Building materials, in particular those manufactured before 1973, have the potential to contain asbestos. Because of the age of the existing buildings, which were built in the early 1960s, asbestos may be present.

The federal government banned the manufacture of lead-based paint in 1978; therefore, paints manufactured before 1978 may contain lead. The Department of Housing and Urban Development (HUD) and the California Department of Health Services (California DHS) have defined lead-based paint as any paint that is more than 0.5% lead by weight. The California Division of Occupational Safety and Health (Cal/OSHA) states that work that involves the disturbance of materials that are more than 0.06% lead by weight must be conducted in accordance with the Construction Lead Standard (CCR Title 8, Section 1532.1). Because of the age of buildings at the Project site (built in the early 1960s), lead-based paint may be present at the site.

At the time of preparation of the Phase I ESAs, the Project site was not identified as a site with releases of hazardous materials or violations. The Phase I ESAs did not identify any recognized environmental conditions (RECs).

The Project site was identified in various environmental databases as a site with a history of hazardous material handling. The Project site was listed in the Environmental Database Reports as Moore Material Handling Group and ARS Rescue Rooter at 825 Mahler Road; Import & Export Company at 1499 Old Bayshore Highway; and Electroloom at 801 Mahler Road. Records received from the San Mateo County Environmental Health Department and Burlingame City Clerk noted minor violations at the 825 Mahler site regarding improper storage, labeling, and documentation of hazardous materials. However, none of the records indicate any significant violations or releases that would constitute an environmental concern for the Project site.

The 1499 Old Bayshore Highway and 801 Mahler Road Phase I ESA identified the following off-site properties (within 1/8 mile of the Project site) that may cause potential environmental concern to the Project site because of the off-site location's environmental history.

- *Union Oil SS/Noonan's Union Service/Unocal at 1500 Old Bayshore Highway.* This site is located 75 feet northeast of the Project site. The gas station was the site of a leaking underground storage tank (LUST) case involving gasoline in groundwater. The case was opened in 1994 and closed in 1996.
- *Peninsula Properties at 1461 Old Bayshore Highway.* This site is located about 135 feet southwest of the Project site. The gas station was the site of a LUST case involving gasoline in soil. The case was opened in 1989 and closed in 1993.
- *Humber Realty/Humber Site at 884 Mahler Road*. This site is located about 375 feet southwest of the Project site. The gas station was the site of a LUST case involving gasoline in groundwater. The case was opened in 1991 and closed in 1993.
- *New Continuation/Alternative High School at 858-860 Hinckley Road*. This site is located about 0.11 mile west of the Project site. This property was the site of an investigation that was

withdrawn from DTSC oversight in July 2018. Potential contaminates of concern included arsenic, benzene, chlordane, total chromium, DDD, DDE, DDT, lead, methyl tertbutyl ether (MTBE), naturally occurring asbestos (NOA), polychlorinated biphenyls (PCBs), polynuclear aromatic hydrocarbons (PAHs), tetrachloroethene (PCE), TPH-diesel/motor oil (TPH-s and TPH-mo), trichloroethene (TCE), and vinyl chloride. The contaminated soils were to be removed as part of a Mitigation Monitoring and Reporting Program. This site does not appear to pose an environmental threat to the proposed Project and is now occupied by Peninsula High School.

- *Coit Cleaning and Restoration Services/Coit Drapery & Carpet Cleaners at 897 Hinckley Road*. This site is located about 720 feet west of the Project site. This active drycleaner facility is a chemical storage facility and listed under the EPA Emissions Inventory System (EIS) and the Resource Conservation and Recovery Act of 1976 (RCRA) as an active small quantity generator (SQG). Between 1987 and 2013, Coit reported annual emissions of organic hydrocarbon gases and reactive organic gases. Between 2013 and 2021, Coit was cited by the San Mateo County Department of Environmental Health for violations related to documentation, housekeeping, labeling, retaining shipment records, secondary containment, and hazardous materials business plan. The facility is listed as having a 10,000-gallon motor-vehicle fuel underground storage tank and 1,320-gallon petroleum aboveground storage tank. This facility is the site of an ongoing LUST case involving groundwater. The leak was discovered in 1994, and the case is currently undergoing verification monitoring and all remediation work has been completed. Despite remediation efforts, elevated concentrations of chlorinated VOCs remain in groundwater. Groundwater flow at this site is variable but runs generally to the north and cross gradient to the Project site. Based on its orientation to the Property and non-detected VOCs in the well closest to the Project, it is unlikely that groundwater impacts would reach the Project. Therefore, this site is not considered an environmental concern for the Project.

The 1499 Bayshore Road and 825 Mahler Road Phase I ESAs both identified Coit Cleaning and Restoration Services at 897 Hinckley Road as the only offsite property (within 1/8 mile of the Project site) that may cause potential environmental concern to the Project site because of the offsite location's environmental history. Coit Cleaning and Restoration Services is the only open cleanup case present in the vicinity of the Project site, however due to its location cross-gradient of the Project site and its general northward movement the Phase I ESA did not identify this contamination as likely effecting the Project site.

Phase II ESAs were conducted for both parcels to investigate the possibility of contaminated groundwater migrating to the Project site from Coit Cleaning and to test the soil for metals and pesticides from previous fill material. Soil, grab-groundwater, and sub-slab vapor samples were analyzed and compared against typical screening criteria. Based on soil results, the Project site fill does not appear to be significantly impacted with organochlorine pesticides or metals. Additionally, based on groundwater and sub-slab air samples, groundwater doesn't appear to be impacted by nearby sites or previous site use and the potential for vapor intrusion from groundwater is low. Based on the data collected, no mitigation measures or additional investigations were suggested.

In addition to the sites listed above, there were four additional sites within 0.25 mile of the Project site with a history of releases to the environment (four LUST sites listed in the EnviroStor database). However, all four were granted closure or "no further action" status by the applicable oversight agency.

GeoTracker is the State Water Resources Control Board's (State Water Board) data management system for sites that affect, or have the potential to affect, water quality in California, with emphasis

placed on groundwater. GeoTracker contains records for sites that require cleanup, such as LUST sites, Department of Defense sites, and cleanup program sites. GeoTracker also contains records of various unregulated projects as well as permitted facilities (e.g., irrigated lands, oil and gas production sites, permitted and operating underground storage tanks, land disposal sites). A GeoTracker database query yielded no results for the Project site.[104]

EnviroStor is the California Department of Toxic Substances Control (DTSC) data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons to investigate further. An EnviroStor database query yielded no results for the Project site.[105]

Schools, Airports, and Wildfire

The closest school to the Project site is The Avalon Academy, a private school located approximately 65 feet from the site.[106]

The Project is within 2 miles of SFO (0.9 mile). An Airport Land Use Compatibility Plan (ALUCP) for SFO has been adopted. The Project is not located within an SFO Airport Safety Zone but is in Influence Area B. which requires new plans and projects to demonstrate consistency with the goals and policies of the ALUCP.[107] The Project is not within 2 miles of a private airstrip.

The City of Burlingame falls within a California Department of Forestry and Fire Protection Local Responsibility Area. It is zoned as a Non-Very High Fire Hazard Security Zone.[108]

Regulatory Requirements

Many federal, state, and local regulations regarding the transport, use, or disposal of hazardous materials would apply to the Project. The Federal Toxic Substances Control Act (1976) and the RCRA established an EPA-administered program to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous waste.

U.S. Department of Transportation (DOT) Hazardous Materials Regulations cover all aspects of hazardous materials packaging, handling, and transportation. Parts 107 (Hazard Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), and 177 (Highway Transportation) would all apply to the Project and/or surrounding uses.

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104 State Water Resources Control Board. 2023. *GeoTracker*. Available: https://geotracker.waterboards.ca.gov/. Accessed: October 2, 2023.

105 Department of Toxic Substances Control. 2020. *EnviroStor*. Available: https://www.envirostor.dtsc.ca.gov/public/. Accessed: May 18, 2020.

106 The Avalon Academy. n.d. *The Avalon Academy.* Available: http://www.theavalonacademy.org/contact/. Accessed: September 23, 2023.

107 Ricondo & Associates, Jacobs Consultancy, and Clarion Associates. 2012. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. November. Available: http://ccag.ca.gov/wp-content/uploads/2014/10/Consolidated_CCAG_ALUCP_November-20121.pdf. Accessed: September 24, 2023.

108 California Department of Forestry and Fire Protection. 2007. *Fire and Resource Assessment Program Fire Hazard Severity Zones in SRA*. San Mateo County. Available: https://osfm.fire.ca.gov/media/6802/fhszs_map41.pdf. Accessed: September 23, 2023.

The DTSC, a department of the California Environmental Protection Agency (CalEPA), is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. Division 20, Chapter 6.5, of the California Health and Safety Code deals with hazardous waste control through regulations pertaining to the transport, treatment, recycling, disposal, enforcement, and permitting of hazardous waste. Division 20, Chapter 6.10, contains regulations applicable to the cleanup of hazardous materials releases. Title 22, Division 4.5, contains the environmental health standards for the management of hazardous waste. This includes standards for identification of hazardous waste (Chapter 11) and standards applicable to transporters of hazardous waste (Chapter 13).

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) (California Health and Safety Code, Chapter 6.11, Sections 25404–25404.9) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of environmental and emergency response programs and provides authority to the Certified Unified Program Agency (CUPA). CUPA is designed to protect public health and the environment from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes. This is accomplished through inspections, emergency response, enforcement, and site mitigation oversight. The CUPA for Burlingame is San Mateo County Health.[109]

Cal/OSHA and the federal Occupational Safety and Health Administration (OSHA) enforce occupational safety standards to minimize worker safety risks from both physical and chemical hazards in the workplace. Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices, all of which would be applicable to construction of the Project. The standards included in Cal/OSHA's Title 8 include regulations pertaining to hazard control (including administrative and engineering controls), hazardous chemical labeling and training requirements, hazardous exposure prevention, hazardous material management, and hazardous waste operations.

The California Labor Code is a collection of regulations that include regulation of the workplace to ensure appropriate training on the use and handling of hazardous materials and the operation of equipment and machines that use, store, transport, or dispose of hazardous materials. Division 5, Part 1, Chapter 2.5, ensures that employees who handle hazardous materials are appropriately trained. Division 5, Part 7, ensures that employees who work with volatile flammable liquids are outfitted with appropriate safety gear and clothing.

Dischargers whose projects disturb 1 or more acres of soil, such as the Project, are required to obtain coverage under the Construction General Permit (Order 2009-0009-DWQ). Construction activities subject to this permit include clearing, grading, and ground disturbances such as stockpiling or excavation. The Construction General Permit requires completion and implementation of a site-specific SWPPP.

[109] San Mateo County Health. 2023. *Certified Unified Program Agency*. Available: https://www.smchealth.org/hazardous-materials-cupa. Accessed: September 25, 2023.

Discussion

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Groundwater was encountered at the Project site at depths as low as 3.3 feet bgs. Trenching for utility installations as part of the Project would require excavations to approximately 15 feet. Because of the depth of excavation, the site is expected to require passive dewatering prior to excavation. While the Phase I and II ESAs did not identify any RECs for the Project, they did identify contaminated groundwater 720-feet west of the Project site, at 897 Hinckle. The State Water Board's National Pollutant Discharge Elimination System (NPDES) permit requires discharges of groundwater associated with dewatering not to cause, have reasonable potential to cause, or contribute to an in-stream incursion that would exceed applicable State or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water.

Project construction would involve the routine transport, use, and disposal of hazardous materials such as fuel, solvents, paints, oils, grease, and caulking. During Project operation, hazardous materials that are commonly found in residential, office, and retail spaces (e.g., paints, solvents, cleaning agents) would be stored and used on site. Hazardous materials used during operations would be used in small quantities, and spills would be cleaned as they occur. The transport, use, and disposal of hazardous materials during construction would be required to comply with applicable regulations, as discussed under *Setting.* These include the RCRA, DOT Hazardous Materials Regulations, and the local CUPA regulations. Although these materials would be transported, used, and disposed of during construction and operation, they are commonly used in construction projects and would not represent the transport, use, or disposal of acutely hazardous materials. The impact would be ***less than significant***.

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?

Hazardous materials, including fuel, solvents, paints, oils, grease, etc., would be transported, stored, used, and disposed of on-site during both Project construction and operation. It is possible that any of these substances could be released to the environment during transport, storage, use, or disposal. However, compliance with federal, state, and local regulations, in combination with temporary construction BMPs (as part of Construction General Permit requirements) would ensure that all hazardous materials would be used, stored, and disposed of properly, which would minimize potential impacts related to a hazardous materials release during construction and operation of the Project.

As discussed under *Setting*, the 2022 Phase I and Phase II ESAs, and GeoTracker and EnviroStor databases indicate that offsite properties are unlikely to affect implementation of the Project. This was determined by taking into account the site's location, environmental history and status, and affected media. Because of the build date of the onsite structures, asbestos-containing materials and lead-based paint are most likely present. Demolition activities could release these hazardous materials into the environment and create exposure risks for construction personnel and the surrounding environment. The Federal Toxic Substances Control Act (TSCA) of 1976 provides EPA with the authority to require reporting, record-keeping, testing, and restrictions related to chemical substances and/or mixtures. TSCA addresses issues regarding the production, importation, use, and disposal of specific chemicals, including PCBs, asbestos, radon, and lead-based paint. The DTSC

considers asbestos a hazardous substance and requires removal. Asbestos-containing materials must be removed in accordance with local and state regulations as well as local air district, Cal/OSHA, and California DHS requirements. This includes materials that could be disturbed by demolition and construction activities. Local and state regulations require the following: Prior to construction, asbestos-containing material and lead-based paint surveys would be conducted to determine if these materials are present. If detected on the site, appropriate safety measures would be implemented for their removal, transport, and disposal. Adherence to existing regulations, as well as asbestos-containing material and lead-based paint surveys, would reduce potential impact by identifying and abating materials that contain asbestos or lead.

With respect to Project operation, because of the nature of R&D uses, the possibility exists for hazards related to the handling of hazardous materials. Laboratories associated with R&D/life science uses are categorized as biosafety levels (BSLs) 1 through 4. It is anticipated that the proposed Project would accommodate BSL-1 or BSL-2 laboratories (although current city regulations do not prohibit BSL-3 and BSL-4 laboratories). Regardless of the BSL, the Project would comply with required federal, state, and local standards, including Title 8 of the California Code of Regulations (CCR). Furthermore, in accordance with standard industry practice, any R&D tenant that handles qualifying hazardous materials would be required to meet relevant Biosafety in Microbiological and Biomedical Laboratories (BMBL) and National Institute of Health (NIH) guidelines. All new laboratories that use hazardous materials or generate biohazardous waste are required to obtain a permit for hazardous materials and/or medical waste generation within the city.

Overall, adherence to existing regulations related to construction and operation of the Project would ensure that a hazards impact to the public or environment would be ***less than significant***.

c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

As mentioned previously, the closest school to the Project site is Avalon Academy, which is approximately 65 feet from the Project site; Burlingame Music School and Peninsula High School are also located within 0.25 -mile from the Project site. As discussed in Impact IX(a), the routine transport, use, storage, and disposal of hazardous materials such as fuel, solvents, paints, oils, grease, and caulking would occur during both construction and operation of the Project. Such transport, use, and disposal would comply with applicable regulations, such as the RCRA, DOT Hazardous Materials Regulations, and the local CUPA regulations. Although small amounts of hazardous materials would be transported, used, and disposed of during construction, these materials are commonly used in construction projects and would not represent the transport, use, and disposal of acutely hazardous materials.

Asbestos-containing materials and lead-based paint both likely occur at the Project site. Demolition could release these contaminants near a school. However, asbestos-containing material and lead-based paint surveys would be conducted in compliance with existing regulations. If these materials are detected on the site, appropriate safety measures would be implemented for their removal, transport, and disposal. Therefore, compliance with existing regulations would ensure that the impact on schools within 0.25-mile of the Project site would be ***less than significant***.

d. Be located on a site that 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?

United States Code Section 65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites, California DHS–listed contaminated wells for drinking water, State Water Board-listed sites with LUSTs or discharges of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material. The Project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to United States Code Section 65962.5. Therefore, the Project would not create a significant hazard to the public or the environment, and there would be ***no impact***.

e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?

As discussed previously, the Project is within 2 miles of SFO. The ALUCP is subject to land use policies and restrictions, which include a height restriction associated with Federal Aviation Administration (FAA) regulations. The Project applicant has received a Determination of No Hazard to Air Navigation for the Project from the FAA.[110] In October 2023, the City/County Association of Governments (C/CAG), acting as the San Mateo County Airport Land Use Commission, determined that Burlingame's Zoning Ordinance Update is conditionally consistent with the ALUCP.[111] The project, consistent with the 2040 General Plan land use and zoning designation of I/I, requires no additional determination from C/CAG. Additionally, the Project site does not fall within any of the safety compatibility zones and,[112] therefore, is not within an area of potential danger involving operation of SFO. Therefore, the Project would not result in a safety hazard or excessive noise for people in the Project area, and the impact would be ***less than significant***.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Project would construct a new structure on previously developed commercial land. Access points to the site would be provided to ensure proper access for emergency vehicles. Although the City does not have an established evacuation plan, the Project would adhere to the guidelines established by the Community Safety Element of the Burlingame General Plan.[113] Therefore, the

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110 Federal Aviation Administration. 2023. *Determination of No Hazard to Air Navigation*. Letter to Peter Banzhaf King 1499 Bayshore Owner LLC., November 28.

111 City/County Association of Governments of San Mateo County Board of Directors. 2023. *C/CAG Agenda Report: Review and approval of Resolution 23-89 determining that the Burlingame Zoning Ordinance Update is conditionally consistent with the Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport.* From: Sean Charpentier, Executive Director, October 12.

112 Ricondo & Associates, Jacobs Consultancy, and Clarion Associates. 2012. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. November. Available: http://ccag.ca.gov/wp-content/uploads/2014/10/Consolidated_CCAG_ALUCP_November-20121.pdf. Accessed: September 24, 2023.

113 City of Burlingame. 2019. General Plan Update. *Envision Burlingame General Plan*. Available: https://www.burlingame.org/departments/planning/general_plan_update.php. Accessed: September 24, 2023.

Project would not conflict with an adopted emergency response or evacuation plan, and the impact would be ***less than significant***.

g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The Project site, which is in an urbanized setting, does not lie within a Very High Fire Hazard Severity Zone of either the State Responsibility Area or the Local Responsibility Area. As discussed in Section XX. *Wildfire*, the area lacks features that normally elevate wildland fire risks (dry vegetation, steeply sloped hillsides, etc.). As such, wildfire is unlikely to occur at the Project site. However, there have been occurrences in which wildfire has spread from non-urban to urban areas (e.g., the Tubbs Fire of 2017, a wildfire that spread to urbanized areas in Napa, Sonoma, and Lake Counties). Accordingly, although it is unlikely that the Project would expose people or structures, either directly or indirectly, to significant risks involving wildland fires, there is a slight risk. The impact would be ***less than significant***.

X. Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			X	
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
1. Result in substantial erosion or siltation on or off site;			X	
2. Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site;				
3. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
4. Impede or redirect flood flows?				
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Setting

The Project site is in the Mills Creek watershed, within the larger San Francisco Bay Estuaries Watershed.[114,115] The Mills Creek watershed drains the Mills Canyon area, which extends from Skyline Boulevard to a lower-level area bounded by Hillside Drive to the south and Mercy High School/Ray Park to the north. The drainage is collected in Mills Creek after passing under El Camino Real and California Drive in parallel 54-inch culverts, then continuing within open channels and box culverts to the Bay.[116]

The State Water Board and the Regional Water Board monitor water quality in the Bay Area. These agencies oversee implementation of NPDES stormwater discharge permits. The State Water Board has implemented a NPDES Construction General Permit for the State of California (Order 2022-0057-DWQ). Dischargers whose projects disturb1 or more acres of soil are required to obtain coverage under the Construction General Permit. The Construction General Permit requires a SWPPP to be prepared prior to commencement of construction.

The City of Burlingame participates in the San Mateo Countywide Pollution Prevention Program (SMCWPPP) and is required to implement low-impact development (LID) BMPs under NPDES Permit No. CAS612008, Order No. Order R2-2022-0018, adopted May 11, 2022. This NPDES permit is also known as the MRP. Provision C.3 of the MRP is directly applicable to the Project. This provision allows permittees to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address both soluble and insoluble stormwater runoff pollutant discharges and prevent increases in runoff flows from new development and redevelopment projects. This goal is to be accomplished primarily through implementation of LID techniques. LID practices include source-control BMPs, site design BMPs, and stormwater treatment BMPs on site or at a joint stormwater treatment facility.

There are no surface water features on the Project site. Mills Creek is adjacent to the Project site, to the southeast, which flows into San Francisco Bay 300 feet northeast of the Project site. During the geotechnical investigation, groundwater was encountered at a depth ranging from 3.3 feet bgs to 4.0 feet bgs. A high groundwater level of 2 feet (below existing grades) is anticipated for design. Groundwater levels are expected to fluctuate seasonally with variations in rainfall, tides, and other factors.[117] The City of Burlingame is within the Westside Groundwater Basin, which is designated as a very low priority area, per the Sustainable Groundwater Management Act.[118] The South Westside Basin Groundwater Management Plan is a voluntary groundwater management plan of which the City of Burlingame is a part. This voluntary groundwater management plan has the goal of ensuring

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114 Tillery, A. C., J. M. Sowers, and S. Pearce. 2007. *Creek Watershed Map of San Mateo & Vicinity.* Available: http://explore.museumca.org/creeks/WholeMaps/10_San%20Mateo%20Creek%20Map.pdf. Accessed: August 25, 2023

115 Oakland Museum of California. n.d. *Guide to San Francisco Bay Area Creeks, Mills Creek Watershed*. Available: http://explore.museumca.org/creeks/1560-RescMills.html. Accessed: August 25, 2023.

116 City of Burlingame. n.d. *Mills Creek Watershed Projects.* Available: https://www.burlingame.org/document_center/Public%20Works/Stormwater%20Management/Mills%20Creek%20Watershed.pdf. Accessed: August 25, 2023.

117 Rockridge Geotechnical. 2022. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation 1499 Old Bayshore Highway Burlingame, California. January 11.

118 California Department of Water Resources. 2020. *SGMA Basin Prioritization Dashboard*. Available: https://gis.water.ca.gov/app/bp-dashboard/final/. Access: August 25, 2023.

a sustainable, high-quality, reliable water supply at a fair price, achieved through local groundwater management, for beneficial uses.[119] The Project site is categorized by the Federal Emergency Management Agency (FEMA) as Zone AE (100-year floodplain), a special flood hazard area subject to inundation by a 1% annual-chance flood event.[120]

Discussion

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Construction activities have the potential to result in runoff that contains sediment and other pollutants, which could degrade water quality if not properly controlled. Sources of pollution associated with construction include chemical substances from construction materials and hazardous or toxic materials, such as fuels. As described in Impact IX(a), the Project would be subject to state and federal hazardous materials laws and regulations, which would minimize the risk of affecting the quality of surface water and groundwater. More than 1 acre of soil would be affected by the Project; therefore, the Project would be subject to the Construction General Permit. Furthermore, the Project would be required to comply with the MRP. Erosion control requirements are stipulated in the Construction General Permit and the MRP. These requirements include preparation and implementation of a SWPPP that contains BMPs. The purpose of the SWPPP is to identify potential sediment sources and other pollutants and prescribe BMPs to ensure that potential adverse erosion, siltation, and contamination impacts do not occur during construction activities. Implementation of a SWPPP with BMPs would control erosion and protect water quality from potential contaminants in stormwater runoff emanating from the construction site. BMPs may include damp street sweeping; appropriate covers, drains, and storage precautions for outdoor material storage areas; temporary cover for disturbed surfaces; and sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for stock piles, or other BMPs to trap sediments. Such BMPs would help to protect surface water and groundwater quality during construction.

Construction of the Project would involve ground-disturbing activities such as excavation. Given the historic high groundwater level of 3 feet bgs, it is anticipated that construction activities would encounter groundwater and would require passive dewatering. Dewatering could result in the exposure of pollutants from contaminated groundwater, if present. Phase II ESAs were conducted to investigate the possibility of contaminated groundwater migrating to the Project site from nearby contaminated sites. However, results indicate that offsite properties are unlikely to affect implementation of the Project, are described in Section IX, *Hazards and Hazardous Materials*. For water to be discharged to the Bay, the contractor would notify the San Francisco Bay Regional Water Board and comply with the board's requirements related to the quality of water and discharges. The Construction General Permit provides coverage for dewatering activities, provided that dischargers prove the quality of water to be adequate and not likely to affect beneficial uses. However, groundwater sampling and/or treatment may be required to ensure compliance with applicable construction dewatering discharge permitting. In the unlikely event that contaminated groundwater

119 WRime. 2012. *South Westside Basin Groundwater Management Plan*. July 2012.

120 Federal Emergency Management Agency. 2019. FEMA's National Flood hazard layer (NFHL) Viewer *Flood Insurance Rate Map 06081C0151F*. Available: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Effective date: April 5, 2019. Accessed: August 25, 2023.

is encountered, compliance with discharge sampling, monitoring, and reporting requirements are required. If it is found that the groundwater does not meet water quality standards, it must either be treated prior to discharge so that all applicable water quality objectives (as designated in the Basin Plan) are met or hauled off-site for treatment and disposal at an appropriate waste treatment facility that is permitted to receive such water. Therefore, groundwater quality impacts during construction would be ***less than significant***.

Pollutants in stormwater runoff from urban development, such as the Project, have the potential to violate water quality standards if the types and amounts are not adequately reduced. Stormwater runoff from the types of urban uses that would be facilitated by Project approval is regulated under the MRP. The Project site would treat stormwater on site with LID treatment measures and mechanical treatment, as required by NPDES. Proposed BMPs include bioretention areas, self-retaining areas, and self-treating areas. The Project applicant would be required to submit the SMCWPPP checklist to the City to show compliance with NPDES regional permit requirements. BMPs included in site designs and plans for the Project would be reviewed by the City's engineering staff to ensure appropriateness and adequate design capacity prior to permit issuance. The San Francisco Bay Regional Water Board has incorporated requirements in the MRP to protect water quality and approved the SMCWPPP, which is in compliance with the Municipal Stormwater NPDES Permit. The City review and permitting process will ensure that the permit's waste discharge requirements are not violated by the Project. For these reasons, the Project would not violate water quality standards or waste discharge requirements during operation, including standards and requirements regarding surface water and groundwater quality. Operational impacts would be ***less than significant***.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Per the Sustainable Groundwater Management Act, all of California's 515 groundwater basins are classified into one of four categories: high, medium, low, or very low priority. The Project site is within the Westside Groundwater Basin, which is classified as very low priority. Groundwater is not a source of supply or recharge; the City's sole source of potable water is the San Francisco Public Utilities Commission (SFPUC) Regional Water System (RWS), which obtains approximately 85%of its water supply from Hetch Hetchy Reservoir. Nonetheless, the City is a part of the South Westside Basin Groundwater Management Plan, which is a voluntary groundwater management plan.

Groundwater was encountered at depths as low as 3.3 feet bgs. Design groundwater levels for the Project site are 2 feet (below existing grades).[121] While the Project site would be raised, and generally, there would likely be localized dewatering related to excavated features. Although dewatering could be required, it would represent a short-term, less-than-significant impact because dewatering activities would be temporary. In addition, groundwater is not a source of water supply, and dewatering would not have a substantial adverse effect on surface water/groundwater interactions and recharge. Dewatering would not adversely affect groundwater supplies because the City's sole source of potable water is the SFPUC RWS. Furthermore, the Project would increase the pervious cover of the site from 10,011 square feet to 26,192 square feet, improving the potential for groundwater recharge. The Project would, therefore, not substantially decrease groundwater

[121] Rockridge Geotechnical. 2022. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation 1499 Old Bayshore Highway Burlingame, California. January 11.

supplies or interfere with groundwater recharge. The Project's impact would be ***less than significant***.

c.1. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: Result in substantial erosion or siltation on or off site?

The Project site is adjacent to Mills Creek. No project-related construction would take place within Mills Creek; therefore, the course of Mills Creek would not be altered by construction of the Project.

During construction, stormwater drainage patterns could be temporarily altered due to site grading, preparation, and excavation activity. However, the Project construction would implement BMPs, required in the Project SWPPP to minimize the potential for erosion or siltation in nearby storm drains and temporary changes in drainage patterns during construction. Construction BMPs would capture and infiltrate small amounts of sheet-flow into the ground such that offsite runoff from the construction site would not increase, ensuring that drainage patterns are not significantly altered. Measures required by the Construction General Permit would also limit site runoff during construction and would not alter stormwater drainage patterns. BMPs would be implemented to control construction site runoff, ensure proper stormwater control and treatment, and reduce the discharge of pollution to the storm drain system.

Under existing conditions, stormwater from the Project site is conveyed to a concrete V-gutter that flows to a drain inlet along Mahler Road. With Project implementation, treated stormwater would drain through three existing 18-inch storm drain outfalls along Mahler Road and Old Bayshore Highway, and into Mills Creek. The Project site would treat stormwater on site, with LID treatment measures and mechanical treatment, per the NPDES requirements and Provision C.3, Stormwater Technical Guidance.

However, stormwater runoff could unintentionally be discharged into Mills Creek. As described in Impact X(a), the Project would implement LID treatment measures and mechanical treatment BMPs per NPDES regional permit requirements to manage stormwater and associated pollutants. Proposed BMPs include bioretention areas, self-retaining areas, and self-treating areas. Furthermore, impervious surfaces would be reduced from the existing 2.74 acres to approximately 2.34 acres after Project construction.[122] The reduction in impervious surfaces would decrease the amount of stormwater runoff and associated pollutants generated by the Project site. With the reduction in impervious surfaces, the Project would generate less stormwater runoff and potential discharge into Mills Creek compared to existing conditions. Therefore, changes to drainage patterns due to the Project would not result in substantial erosion or siltation on site or off site. Therefore, this impact would be ***less than significant***.

c.2. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?

As described above in Impact X(c)(i), the Project would not alter the course of Mills Creek. Overall, the project would reduce the area of impervious surfaces and the amount of stormwater runoff generated at the site. In addition, proposed LID treatment measures and mechanical treatment

[122] BKF Engineers. 2023. *1499 Bayshore Highway Hydrology Exhibit*. Prepared June 27, 2023.

BMPs, including bioretention areas, self-retaining areas, and self-treating areas, would manage surface runoff. Therefore, changes to drainage patterns due to the Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite. Therefore, this impact would be ***less than significant***.

c.3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As stated in Impact X(c)(1), the Project would decrease the area of impervious surfaces. As a result, the demands on the City stormwater drainage system would be reduced and there would be no additional sources of polluted runoff. Furthermore, as stated in Impacts X(a), the Construction General Permit would require the Project to implement a SWPPP with BMPs during construction to protect water from potential contaminants in stormwater runoff from the site. The Project would also be subject to the requirements of Provision C.3 of the MRP. The Project site would treat stormwater on site with LID treatment measures and mechanical treatment, as required by NPDES. Proposed BMPs include bioretention areas, self-retaining areas, and self-treating areas, which would manage surface runoff and associated pollutants. Through compliance with state and local regulations, as well as implementation of BMPs, impacts related to surface runoff, including capacity of the drainage system or additional sources of polluted runoff, would be ***less than significant***.

c.4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: Impede or redirect flood flows?

The Project site is located within a special flood hazard area (FEMA Zone AE) and subject to flood hazards, with a base flood elevation of 10 feet.[123] In order to address flooding issues, the Project would be designed to account for flooding and sea-level rise due to the proximity of San Francisco Bay. The Project proposes to raise the Project site base elevation to 13 feet above sea level. To provide long-term flood protection and shoreline resilience, a permanent four-hundred linear foot sea wall 15.5 feet above sea level would be installed along Mills Creek. In addition, the Project would minimize impervious surface areas, which would minimize the potential for overland or impeded floodflows. LID treatment measures and mechanical treatment such as bioretention areas, self-retaining areas, and self-treating areas would also manage flows. Therefore, the Project would not impede or redirect floodflows, and impacts would be ***less than significant***.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The Project site is located within a special flood hazard area (FEMA Zone AE) and subject to flood hazards.[124] The Project site is within a tsunami inundation zone and, therefore, subject to flooding

123 Federal Emergency Management Agency. 2019. FEMA's National Flood hazard layer (NFHL) Viewer *Flood Insurance Rate Map 06081C0151F*. Available: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Effective date: April 5, 2019. Accessed: August 25, 2023.

124 Federal Emergency Management Agency. 2019. FEMA's National Flood hazard layer (NFHL) Viewer *Flood Insurance Rate Map 06081C0151F*. Available: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Effective date: April 5, 2019. Accessed: August 25, 2023.

from tsunami.[125] Seiches occur in an enclosed or partially enclosed body of water, such as a lake or reservoir. There are no large bodies of fresh water, such as reservoirs or lakes, within the Project vicinity. Although the Bay is a large and open body of water, there is no immediate risk of seiche. Large waves, both sea and swell, generated in the Pacific Ocean undergo considerable refraction and diffraction upon passing through the Golden Gate, resulting in greatly reduced heights when they reach the Project site. Therefore, there is no risk of seiche that would affect the Project site, and the Project site is not subject to flooding from a seiche. Conditions under the Project would be similar to existing conditions and would not increase the potential for site inundation.

In the event of a flood hazard, to reduce the risk of pollutant release, the Project would comply with the requirements of local water quality programs and associated municipal stormwater NPDES MS4 and MRP permits to manage flood risks and water quality. Conformance to these requirements would ensure that any risk of release of pollutants due to project inundation in a flood hazard, tsunami, or seiche zone would be minimized. The Project would not release pollutants due to Project inundation by flood hazard, tsunami, or seiche, resulting in ***less-than-significant*** impacts.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Project implementation would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The Project would result in an increase in pervious surface area, which would result in increased capacity for groundwater recharge and a decrease in the volume of pollutants leaving the Project site. The Project applicant would comply with the appropriate water quality objectives for the region, including the MRP. The City review and permitting process would ensure that the permit's waste discharge requirements would not be violated by the Project. As part of compliance with permit requirements during ground-disturbing or construction activities, implementation of water quality control measures and BMPs would ensure that water quality standards would be achieved, including water quality objectives that protect designated beneficial uses of surface water and groundwater, as defined in *San Francisco Bay Basin (Region 2) Water Quality Control Plan*.[126]

The NPDES Construction General Permit requires stormwater discharges not to contain pollutants that cause or contribute to an exceedance of any applicable water quality objectives or water quality standards, including designated beneficial uses. In addition, as described in Impact X(b), the City is part of the South Westside Basin Groundwater Management Plan, which is a voluntary groundwater management plan. Dewatering would be conducted temporarily during the construction phase. Despite requiring temporary passive dewatering during construction, dewatering would not alter groundwater supply, the Project would not conflict with implementation of this plan because it does not conflict with the plan's goal of ensuring a sustainable, high-quality, reliable water supply. Further, the Project would increase pervious surfaces, which is beneficial for groundwater infiltration. Thus, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and the impact would be ***less than significant***.

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[125] California Emergency Management Agency. 2022. *San Mateo County Tsunami Hazard Areas*. Available: https://www.conservation.ca.gov/cgs/tsunami/maps/san-mateo. Accessed: August 25, 2023.

[126] San Francisco Regional Water Quality Control Board. 2023. *San Francisco Bay Basin (Region 2) Water Quality Control Plan*. March 7, 2023. Available: https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html#basinplan. Accessed: August 25, 2023.

XI. Land Use and Planning

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Physically divide an established community?				X
b.	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

Setting

The Project site is governed by the 2040 General Plan, the Burlingame Municipal Code, and the Airport Land Use Compatibility Plan (ALUCP). The Project site is within the ALUCP's SFO Airport Influence Area B, which requires new plans and projects to demonstrate consistency with the goals and policies of the ALUCP.[127] Burlingame is divided into a series of planning areas with a variety of land uses, including commercial, office, cultural, civic, and quasi-civic uses. Land uses in the vicinity of the Project site include retail, commercial, office, industrial, and educational uses. In addition, the Project site is in the vicinity of two large-scale transportation uses: SFO is approximately 0.90 mile to the north, and US 101 is approximately 0.20 mile to the west.

On January 7, 2019, the City adopted its *Envision Burlingame General Plan* (2040"General Plan), which updated the City's previous General Plan, including vision, goals, policies, and land use designations, to provide direction for the City's growth through 2040.[128] The Project site is within the I/I land use designation**.** According to the 2040 General Plan, the I/I land use designation encourages the creation of light industrial and logistics centers with complementary commercial businesses**.** The Municipal Code, which implements the 2040 General Plan, was also updated to include the new I-I zoning designation (Municipal Code Chapter 25.12), and the Project site is within the I-I zoning designation. The I-I zone accommodates and encourages diverse and compatible light industrial, office, R&D, and creative business enterprise uses to enrich the lives of residents, employees, and visitors and to increase employment opportunities, while providing opportunities for a variety of commercial and industrial business types that contribute to the stability of the City's economy.[129]

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127 City/County Association of Governments of San Mateo County. 2012. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. November. Available: ccag.ca.gov/wp-content/uploads/2014/10/Consolidated_CCAG_ALUCP_November-20121.pdf. Accessed August 14, 2023.

128 City of Burlingame. 2019. General Plan Update. *Envision Burlingame General Plan*. Available: https://www.burlingame.org/departments/planning/general_plan_update.php. Accessed: August 10 2023.

129 City of Burlingame. 2021. *City of Burlingame Zoning Map*. Available: https://cms6.revize.com/revize/burlingamecity/Zoning%20Map%20-%202021.pdf. Accessed: August 10, 2023.

The Project site is developed and covers 2.97 acres in the northern portion of the City. Upon commencement of Project construction, the site would comprise one vacant two-story office building and a vacant concrete tilt-up warehouse building and at-grade parking.

Discussion

a. Physically divide an established community?

The Project site is currently developed with one two-story office building and a warehouse. The Project would merge the two existing parcels and redevelop the site to construct an office and office/research-and-development (R&D) building with parking. This would be consistent with planned land uses established in the 2040 General Plan. No residential uses or established communities are within the immediate vicinity of the Project site. Implementation of the Project would not result in physical division of an established community. Therefore, there would be ***no impact***.

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Project would be consistent with the Municipal Code and 2040 General Plan land use designations. The Project would include uses that would be consistent with those permitted for the Innovation Industrial area of the 2040 General Plan. A project may develop at one of three FAR categories, or tiers, ranging from Base Standard Intensity (Tier 1) to Maximum Intensity (Tier 3): the Project is proposed as a Tier 3 project. Tier 3 projects within this zone and with frontage along Old Bayshore Highway may reach a maximum FAR of 2.75 and may exceed a maximum height of 65 feet with approval of a Special Permit by the Burlingame Planning Commission. Such projects must fulfill specific development standards and community benefit thresholds, as well as meet Special Permit findings for community benefit objectives for development under Tier 3. The proposed Project would reach a FAR of 2.43, and since it would reach a maximum height of approximately 148-feet, it will require a Special Permit by the City Planning Commission; the Project is also providing a community benefits program, which includes Bay Trail access and publicly accessible open space along Mills Creek.[130]

Within this area, developments must be set back a minimum of 10 feet from the curb along the front of the highway and 10 feet on the sides and rear. In addition, developments are subject to landscaping and lot-coverage standards, which require at least 15% of the site to be covered in landscaping and a maximum lot coverage of 70%, respectively. Approximately 27.4 percent of the Project site would be covered in landscaping in accordance with Municipal Code Section 25.36.040, which would fulfill the City's minimum landscaping requirement. The Project would provide adequate setbacks to be consistent with I/I zoning, and lot coverage is estimated at around 25%. Although the City does not have any established open space-requirement standards for the I-I zoning district, the Project would include approximately 6,900 square feet of publicly accessible open space in the form of an outdoor plaza on the southeastern side of the Project site.

[130] FAR calculated by dividing total gsf by area of lot (314,921 gsf/129,373 sf). 129, 373 comes from the 2.97-acre lot converted to square feet.

The 2040 General Plan Community Character chapter includes various goals, policies, and guidelines pertaining to growth, development and design standards. In particular, the following goals and policies would apply to the Project:

- **Policy CC-1.9:** Green Building Practice and Standards Support the use of sustainable building elements such as green roofs, cisterns, and permeable pavement, continue to enforce the California Green Building Standards Code (CALGreen), periodically revisit the minimum standards required for permit approval, and adopt zero-net-energy building goals for municipal buildings. [DR, SO, S]
- **Policy CC-1.14:** Bird-friendly Design For projects in the Bayfront area, incorporate into the development review process design measures that promote bird safety as a means of minimizing adverse effects on native and migratory birds. [DR]
- **Goal CC-5:** Maintain and promote the Bayfront Area as a premier destination along San Francisco Bay for land- and water-based recreation, hospitality uses, creative industries, logistics support, water-based transit service, and local businesses that benefit from proximity to San Francisco International Airport.
- **Policy CC-5.2:** Diverse Industrial Uses Continue to accommodate diverse industrial functions, and support emerging creative businesses through flexible zoning regulations. [DR]
- **Policy CC-5.5:** Trail Connectivity Coordinate with partner agencies to connect gaps in the Bay Trail, and require new waterfront development to improve and maintain trail segments along property lines. [AC, PA, H]
- **Policy CC-6.3:** Infill Development Encourage increased intensity via high-quality infill development on surface parking lots, and support the conversion of surface parking lots into active commercial and hospitality uses. [DR]
- **Policy CC-6.7:** Sea Level Rise Require that new and existing development along the Bayfront make provisions for sea level rise and flood risks, which may involve payment of assessments to fund City or other efforts to build a unified defense system. Maintain minimum waterfront setback, with the setback area providing space in the future to accommodate sea level rise and flooding defenses. Design new buildings with habitable areas elevated to minimize potential damage from exceptional storm events. [DR, FB, AC, S]

In general, the Project would be consistent with the 2040 General Plan goals and policies. However, it should be noted that the ultimate determination regarding General Plan consistency will be made by the City Planning Commission. In addition, the ultimate findings regarding General Plan consistency does not require the Project to be entirely consistent with each individual goal and policy. A project can be generally consistent with the General Plan, even though the project may not promote every applicable goal and policy.

The ALUCP identified policies for projects within the airport influence area. While the Project is in an airport influence area (Area B), in October 2023 C/CAG determined that Burlingame's Zoning Ordinance Update, including the zoning for I/I, is conditionally consistent with the ALUCP.[131] The

[131] City/County Association of Governments of San Mateo County Board of Directors. 2023. *C/CAG Agenda Report: Review and approval of Resolution 23-89 determining that the Burlingame Zoning Ordinance Update is conditionally consistent with the Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport.* From: Sean Charpentier, Executive Director, October 12.

Project, being consistent with the 2040 General Plan land use and zoning designation of I/I, requires no additional determination from C/CAG. The Project would, therefore, be consistent with the ALUCP. While the Project is located within influence Area B, as addressed under Section IX. *Hazards and Hazardous Materials,* it is not within Section XIII. *Noise,* it is not located within any noise contours.

The Project would be generally consistent with the Municipal Code and 2040 General Plan land use designations, plans, and policies, as well as the ALUCP, resulting in a ***less-than-significant*** impact.

XII. Mineral Resources

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
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?				X

Setting

Under the Surface Mining Control and Reclamation Act, the California Geological Survey is responsible for classifying land as Mineral Resource Zones (MRZ), based on the known or inferred mineral resource potential of that land. According to available data, the Project site and the area surrounding the Project site have been classified as MRZ-1, which is defined as "an area where adequate geologic information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence."[132]

Discussion

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?

Because the Project site is identified as MRZ-1, it is not underlain by any known significant mineral deposits. Therefore, the Project would not result in the loss of availability of such resources, and there would be ***no impact***.

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The Project site is developed but not used for mineral recovery. Moreover, no known mineral resources, including locally important mineral resources, are known to exist within the Project site or the surrounding area. Therefore, the Project would not result in the loss of availability of such resources, and there would be ***no impact***.

[132] California Department of Conservation. 1996. *Generalized Mineral Land Classification Map of the South San Francisco Bay Production—Consumption Region*. Map prepared by Susan Kohler-Antablin. California Department of Conservation, Division of Mines and Geology, Sacramento, CA. Available: https://filerequest.conservation.ca.gov/?q=OFR_96-03. Accessed: August 3, 2023.

XIII. Noise

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?		X		
b.	Generate excessive groundborne vibration or groundborne noise levels?			X	
c.	Be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?			X	

Setting

Overview of Noise and Sound

Noise is commonly defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. Because noise is an environmental pollutant that can interfere with human activities, an evaluation of noise is necessary when considering the environmental impacts of a project.

Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient (existing) sound level. Although the decibel scale, a logarithmic scale, is used to quantify sound intensity, it does not accurately describe how sound intensity is perceived by human hearing. The human ear is not equally sensitive to all frequencies in the entire spectrum; therefore, noise measurements are weighted more heavily toward frequencies to which humans are sensitive through a process referred to as *A-weighting*.

Human sound perception, in general, is such that a change in sound level of 1 decibel (dB) cannot typically be perceived by the human ear, a change in sound level of 3 dB is just noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level. A doubling of actual sound energy is required to result in a 3 dB (i.e., barely noticeable) increase in noise; in practice, this means that the volume of traffic on a roadway typically needs to double to result in a noticeable increase in noise.[133]

[133] California Department of Transportation. 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September.

The decibel level of a sound decreases (or attenuates) exponentially as the distance from the source of that sound increases. For a point source, such as a stationary compressor or construction equipment, sound attenuates at a rate of 6 dB per doubling of distance. For a line source, such as free-flowing traffic on a freeway, sound attenuates at a rate of 3 dB per doubling of distance. Atmospheric conditions, including wind, temperature gradients, and humidity, can change how sound propagates over distance and affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface, such as grass, attenuates at a greater rate than sound that travels over a hard surface, such as pavement. The increased attenuation is typically in the range of 1 to 2 dB per doubling of distance. Barriers, such as buildings and topographic features that block the line of sight between a source and receiver, also increase the attenuation of sound over distance.

In urban environments, simultaneous noise from multiple sources may occur. Because sound pressure levels, expressed in decibels, are based on a logarithmic scale, they cannot be added or subtracted in the usual arithmetical way. Adding a new noise source to an existing noise source, with both producing noise at the same level, will not double the noise level. If the difference between two noise sources is 10 A-weighted decibels (dBA) or more, the higher noise source will dominate, and the resultant noise level will be equal to the noise level of the higher noise source. In general, if the difference between two noise sources is 0 to 1 dBA, the resultant noise level will be 3 dBA higher than the higher noise source, or both sources if both are equal. If the difference between two noise sources is 2 to 3 dBA, the resultant noise level will be 2 dBA above the higher noise source. If the difference between two noise sources is 4 to 10 dBA, the resultant noise level will be 1 dBA higher than the higher noise source. Table 16 demonstrates the general results of adding noise from multiple sources.

Table 15. Rules for Combining Sound Levels by Decibel Addition

When two decibel values differ by…	…add the following amount to the higher decibel value	Example
0 to 1 dB	3 dB	60 dB + 61 dB = 64 dB
2 to 3 dB	2 dB	60 dB + 63 dB = 65 dB
4 to 9 dB	1 dB	60 dB + 69 dB = 70 dB
10 dB or more	0 dB	60 dB + 75 dB = 75 dB

Source: California Department of Transportation. 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf. Accessed: August 2, 2023.
dB = decibel.
Note: Note that the examples summarized in this table are rounded to the nearest whole number.

Community noise environments are generally perceived as quiet when the 24-hour average noise level is below 45 dBA, moderate in the 45 to 60 dBA range, and loud above 60 dBA. Very noisy urban residential areas are usually around 70 dBA, community noise equivalent level (CNEL). Along major thoroughfares, roadside noise levels are typically between 65 and 75 dBA CNEL. Incremental increases of 3 to 5 dB to the existing 1-hour equivalent sound level (L_{eq}), or the CNEL, are common thresholds for an adverse community reaction to a noise increase. However, there is evidence that incremental thresholds in this range may not be adequately protective in areas where noise-sensitive uses are located and the CNEL is already high (i.e., above 60 dBA). In these areas, limiting

noise increases to 3 dB or less is recommended.[134] Noise intrusions that cause short-term interior noise levels to rise above 45 dBA at night can disrupt sleep. Exposure to noise levels greater than 85 dBA for 8 hours or longer can cause permanent hearing damage.

Overview of Ground-Borne Vibration

Ground-borne vibration is an oscillatory motion of the soil with respect to the equilibrium position. It can be quantified in terms of velocity or acceleration. Variations in geology and distance result in different vibration levels, including different frequencies and displacements. In all cases, vibration amplitudes decrease with increased distance.

Operation of heavy construction equipment creates seismic waves that radiate along the surface of and downward into the ground. These surface waves can be felt as ground vibration. Vibration from the operation of construction equipment can result in effects that range from annoyance for people to damage for structures. Perceptible ground-borne vibration is generally limited to areas within a few hundred feet of construction activities. As seismic waves travel outward from a vibration source, they cause rock and soil particles to oscillate. The actual distance that these particles move is usually only a few ten-thousandths to a few thousandths of an inch. The rate or velocity, expressed in inches per second, at which these particles move is the commonly accepted descriptor of vibration amplitude, peak particle velocity (PPV).

Vibration amplitude attenuates (or decreases) over distance. This attenuation is a complex function of how energy is imparted into the ground as well as the soil or rock conditions through which the vibration is traveling (variations in geology can result in different vibration levels). The following attenuation equation is used to estimate the vibration level at a given distance for typical soil conditions:[135]

$$PPV = PPV_{ref} \times (25/distance)^{1.5}$$

Table 16 summarizes the typical vibration levels generated by construction equipment that would be used for the Project (noting that no pile-driving is proposed) at a reference distance of 25 feet as well as other distances, as determined with use of the attenuation equation.

[134] Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. Office of Planning and Environment. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/ transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: May 14, 2020.

[135] PPV_{ref} is the reference PPV at 25 feet.

Table 16. Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet	PPV at 50 Feet	PPV at 75 Feet	PPV at 100 Feet	PPV at 175 Feet
Auger drill	0.089	0.0315	0.0171	0.0111	0.0048
Large bulldozer	0.089	0.0315	0.0171	0.0111	0.0048
Small bulldozer	0.003	0.0011	0.0006	0.0004	0.0002

Source: Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. Office of Planning and Environment. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: August 14, 2023.
PPV = peak particle velocity

Existing Noise Environment

Noise-sensitive land uses in the Project vicinity consist primarily of adjacent schools and nearby hotels.[136] The closest sensitive land uses are two nearby schools, the Burlingame Music School and the Avalon Academy. The Burlingame Music School is approximately 55 feet from the proposed Project site. Avalon Academy, a school for children with movement disorders such as cerebral palsy, is located approximately 65-feet from the Project site. The nearby Bay Landing Hotel is located approximately 250 feet north of the proposed Project office and R&D building. The existing ambient noise environment in the Project area is characteristic of an urban environment (e.g., highway and local traffic noise, aircraft overflights). Noise from traffic on Old Bayshore Highway and US 101 is the dominant noise source at the Project site.

To quantify existing ambient noise levels in the Project area, measurements were conducted at locations adjacent to the Project site. Long-term (24-hour) measurements were conducted between Tuesday, April 3, 2018, and Wednesday, April 4, 2018; short-term measurements were conducted on Tuesday, April 4, 2018. Short- and long-term measurement locations were selected in areas near the Project site that could be sensitive to noise, and in areas near the Project site to help characterize existing noise in the Project area. The locations for the noise measurement sites are described in Tables 17 and 18 and are shown in Figure 10. These tables also summarize the results of the noise measurement survey. For the complete dataset of measured noise levels, please refer to Appendix E.

[136] Noise-sensitive land uses are generally defined as locations where people reside, or the presence of unwanted sound could adversely affect the use of the land. Noise-sensitive land uses typically include single- and multi-family residential areas, health care facilities, lodging facilities, and schools.

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Figure 10
Noise Measurement Locations
1499 Old Bayshore Highway

Table 17. Long-Term Noise Level Measurements in and around the Project Site

			Tuesday–Wednesday 04/03/18–04/04/18		
Site	**Site Description**	**Date and Time**	**Measured CNEL (dBA)**	**Measured 12-hour Daytime L_{eq} (7:00 a.m. to 7:00 p.m.) (dBA)**	**Lowest 1-hour L_{eq} (dBA)**
LT-1a	Located on a pole directly across from The Avalon Academy, on the south side of Mahler Road	Start: Tuesday, April 3, 2018, at ~11:00 a.m. End: Wednesday, April 4, 2018, at ~12:00 p.m.	67.8	64.8	52.2
LT-1b	Located on a pole south of LT-1a, on the south side of Mahler Road	Start: Tuesday, April 3, 2018, at ~11:00 a.m. End: Wednesday, April 4, 2018, at ~12:00 p.m.	67.0	64.7	51.6
LT-2a	Located in a tree south of the parking lot for the Bay Landing Hotel, east of Old Bayshore Highway	Start: Tuesday, April 3, 2018, at ~12 noon End: Wednesday, April 4, 2018, at ~12 noon	72.2	69.4	59.0
LT-2b	Located in a tree north of LT-2a, further east of Old Bayshore Highway	Start: Tuesday, April 3, 2018, at ~12 noon End: Wednesday, April 4, 2018, at ~12 noon	61.6	56.7	48.6

Note: See Appendix E for data.

LT = long-term (24-hour/multi-day) ambient noise measurement; L_{eq} = equivalent sound level (1 hour); L_{dn} = day-night level; dBA = A-weighted decibels

Table 18. Short-Term Noise Level Measurements near the Project Site

Site	Site Description	Date and Time	Primary Noise Sources	Measured Noise Level (dBA)		
				L_{eq}	L_{max}	L_{min}
ST-1	Near the intersection of Old Bayshore Highway and Mahler Road, in front of the Burlingame Music School and north of the Project site	04/03/2018 at 12:05 p.m.	Traffic along Old Bayshore Highway, aircraft noise from nearby SFO, intermittent bird chirping	60.7	74.9	48.2
ST-2	Northeast of the Project site, along the Bay Trail, south of the Bay Landing Hotel	04/03/2018 at 12:05 p.m.	Traffic along Old Bayshore Highway, aircraft noise from nearby SFO, intermittent bird chirping	63.7	77.5	52.7

Note: See Appendix E for data.

ST = short-term (~15-minute) ambient noise measurement; SFO = San Francisco International Airport; L_{eq} = equivalent sound level (1 hour); L_{max} = maximum sound level, or the maximum sound level measured during a given measurement period; L_{min} = minimum sound level, or the minimum sound level measured during a given measurement period; dBA = A-weighted decibel.

As shown in Table 17, the noise level along the north side of the Project site (along Mahler Road) was approximately 67.8 dBA CNEL (refer to measurement LT-1a). The 24-hour CNEL noise level at the nearby Bay Landing Hotel (best represented by LT-2a) was 72.2 dBA CNEL. As shown in Table 18, the short-term measurement location closest to the west side of the Project site, ST-1 (on the southern perimeter of the Burlingame Music School), produced a 15-minute average noise level of 60.7 dBA Leq. The maximum sound level (L_{max})[137] recorded during this measurement was 77.5 dBA L_{max}. Although some aircraft and wildlife noises (birds chirping) were captured during the measurements, the predominant noise source for all measurements was roadway traffic on Old Bayshore Highway, which is adjacent to the Project site.

Regulatory Setting

There are no federal or State noise standards that are directly applicable to the Project. With respect to local noise standards, the Municipal Code and the 2040 General Plan contain regulations and guidelines that are applicable to the Project. The applicable noise standards from these two sources are described below.

The City of Burlingame Municipal Code

The Municipal Code does not contain numerical noise thresholds for construction activities. Instead, it identifies specific hours in which construction is allowed to occur if such work requires a permit, takes place outside a fully enclosed building, and exceeds exterior ambient noise levels. Construction activities taking place in the I/I zoning are, where the proposed Project is located, are generally allowed to take place between 7:00 a.m. and 7:00 p.m., on weekdays, and 9:00 a.m. to 6:00 p.m. on Saturdays, with the exception that the use of chainsaws, jackhammers, pile drivers, and pneumatic impact wrenches shall be prohibited from 7:00 a.m. to 8:00 a.m. In the case work needs to be completed before or after these hours, written permission must be granted by the building official.

[137] L_{max} noise level is the maximum sound level measured during a given measurement period.

Chapter 25.31 of the Burlingame Municipal Code contains numerical thresholds for mechanical and HVAC equipment, including fans, vents, generators, and elevator motors integral to the regular operation of climate control, electrical, and similar building systems. Although the noise criteria contained in this code are intended to apply to new residential or mixed-use developments, these are typically applied to mechanical equipment noise for other types of development (such as the Proposed project) as well. Section 25.31 of the Municipal Code states that equipment shall not exceed a maximum outdoor noise level of 60 dBA during daytime hours (7:00 a.m. to 10:00 p.m.), or 50 dBA between the hours of 10:00 p.m. and 7:00 a.m., as measured at the property line on which the equipment is located.

2040 General Plan

The 2040 General Plan, Chapter 8, Community Safety Element, establishes noise and land use compatibility standards to guide new development. It provides goals and policies to reduce the harmful and annoying effects of excessive noise in the City.

The policies relevant to the Project include the following (summarized).

- **Policies CS-4.2 and 4.3**: Requiring the design of new residential development and office development to comply with protective noise standards.
- **Policy CS-4.7**: Monitoring noise impacts from aircraft operations at SFO and Mills-Peninsula Medical Center.
- **Policy CS-4.10:** Requiring development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and minimize impacts consistent with the Municipal Code.
- **Policy CS-4.13:** Requiring a vibration impact assessment for projects that would use heavy-duty equipment and be located within 200 feet of an existing structure or sensitive receptor.

The Community Safety Element of the 2040 General Plan also includes noise compatibility criteria for each category of land use in the City. Multi-family residential land uses are considered conditionally acceptable at noise levels between L_{dn} 60 dB and 70 dB, which means that new development should be undertaken after a detailed analysis of noise reduction requirements is conducted and noise insulation features have been included in the design. Less noise-sensitive land uses, such as commercial and industrial uses, are considered compatible with higher levels of outdoor noise. Figure 11, which is from the 2040 General Plan Community Safety Element, shows the outdoor noise levels that are suitable for the various land use categories.[138]

[138] City of Burlingame. 2019. *Envision Burlingame 2040 General Plan*. Chapter VIII, Community Safety, Figure CS-2: Noise Criteria. Page CS-13. January. Available: BurlingameGP_Final_Nov2019_Chapter 8 (Safety).pdf (revize.com). Accessed November 2, 2023.

Figure 11. City of Burlingame Outdoor Noise-Level Planning Criteria

Land Use Category	Community Noise Exposure Ldn/CNEL, dB					
	55	60	65	70	75	80
Residential – Low Density Single Family, Duplex, Mobile Homes						
Residential – Multi. Family						
Transient Lodging – Motels, Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arenas, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Course, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing Utilities, Agriculture						

NORMALLY ACCEPTABLE
Specified land use is satisfactory based upon the assumption that most buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Comprehensive Airport Land Use Compatibility Plan for SFO (2012)[139]

Noise associated with airport and aircraft operations is considered one of the main areas of concern for airport land use commissions, especially in highly urbanized areas like the Bay Area. According to the 2012 SFO ALUCP, the Airport Influence Area (AIA), the geographic area subject to the land use compatibility considerations identified in the ALUCP, is divided into two areas: Area A and Area B. Area A encompasses all of San Mateo County and the incorporated cities within it. Area B roughly follows noise compatibility and safety zone contours. The Project site is within the ALUCP's SFO Airport Influence Area B, which requires new plans and projects to demonstrate consistency with the goals and policies of the ALUCP.[140]

The 2012 SFO ALUCP has four primary areas of concern, two of which pertain to noise.

a) Aircraft Noise Impact Reduction: To reduce the potential number of future airport-area residents who could be exposed to noise impacts from airport and aircraft operations.

b) Overflight Notification: To establish an area within which aircraft flights to and from the airport occur frequently enough and at a low enough altitude to be noticeable by sensitive residents. Within this area, real estate disclosure notices shall be required, pursuant to state law.

The ALUCP establishes boundaries within which noise compatibility policies apply. These boundaries depict "noise impact areas" or noise compatibility zones, defined by noise contours at the 65 dB CNEL, 70 dB CNEL and 75 dB CNEL contours. Noise compatibility policies apply to each noise impact area or contour. According to Table VI-1 in the ALUCP, commercial uses (e.g., offices and business) or industrial and manufacturing uses and related structures are considered compatible without restrictions within all of these noise impact areas. As shown in Figure IV-3 of the ALUCP, the Project site is not located within any evaluated noise contours, including the 65 dB CNEL noise contour, for SFO.

Discussion

a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies? (Less than Significant with Mitigation)

Construction Noise

Project construction could result in noise that would be perceptible at nearby noise-sensitive land uses. Construction noise was evaluated based on information provided by the Project applicant, including the proposed Project's construction equipment list, and data developed for the air quality analysis, including phasing and schedule assumptions. The typical construction workday would be from Monday through Saturday from 7:00 a.m. to 3:30 p.m., with some construction taking place until 7:00 p.m. Monday through Fridays or 6:00 p.m. on Saturdays, as needed. In general, most

[139] City/County Association of Governments. 2012. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. November. Available: https://ccag.ca.gov/wp-content/uploads/2014/10/Consolidated_CCAG_ALUCP_November-20121.pdf. Accessed: March 27, 2020.

[140] City/County Association of Governments of San Mateo County. 2012. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. November. Available: ccag.ca.gov/wp-content/uploads/2014/10/Consolidated_CCAG_ALUCP_November-20121.pdf. Accessed August 14, 2023.

construction would comply with the applicable time-of-day restrictions for construction in the I/I district of the City, with the exception of some days when construction would start earlier than the hours prescribed in the Municipal Code (i.e., a 7:00 a.m. start time on Saturdays instead of the specified 9:00 a.m. start time for Saturdays in the Municipal Code). In addition, limited concrete pour activities may need to commence prior to 7:00 a.m., with an estimated up to 20 individual instances of approximately 6:00 a.m. early start days for large concrete pours over the 10 months of building exterior and parking structure pour sequence phases.

The Municipal Code states that construction activities taking place within the I/I zoned portion of the City are allowed to occur between 7:00 a.m. to 7:00 p.m. during weekdays, and 9:00 a.m. to 6:00 p.m. on Saturdays. The Project applicant would request a variance from the City to work within the daytime hours they have identified above (e.g., beginning at 7:00 a.m. instead of 9:00 a.m. on Saturdays). Construction would only occur outside of the aforementioned allowable hours if approved in advance by the City. If the early start is approved by the City, the allowable construction hours for the Project would be adjusted to match the proposed construction hours for the Project (i.e., with construction allowed to start at 7:00 a.m. on Saturdays), meaning no numerical municipal code thresholds would apply to construction noise generated during the allowable hours for construction. It is expected that the proposed Project construction would begin in the fall of 2024 and last for 24 months.

Construction noise was evaluated using data and modeling methodologies from the Federal Highway Administration's (FHWA) Roadway Construction Noise Model[141] and Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual*,[142] which predicts the average noise levels at nearby receptors based on the type of equipment proposed for use, the distance from the source to receptor, and the equipment usage factor (the fraction of time the equipment is operating in its noisiest mode while in use). This analysis estimates combined noise by modeling noise from the three loudest pieces of equipment that may be used concurrently and assuming these are located near one another and near the portion of the Project site closest to off-site sensitive land uses. It was assumed that construction noise levels would be reduced at the standard rate of 6 dB per doubling of distance from the source. In addition, to provide a conservative assessment, potential barrier effects provided by walls, fences, buildings, and other objects were not included in the calculations. The average hourly construction noise level (L_{eq}) during each phase was calculated at a reference distance of 50 feet. The reference noise levels were then adjusted for each receiver based on the horizontal distance from the Project site to each receiver. These distances were estimated using Project plans and aerial photography.[143]

There are nine phases proposed for Project construction: two demolition phases, site preparation/grading, pile installation, foundations, building exterior, building interior, parking structure pour sequence, and site finishes. Based on the screening analysis conducted for the Project, site preparation/grading is anticipated to result in the loudest daytime construction noise

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141 Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: August 17, 2023.

142 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*. FTA Report No. 0123, 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed August 7, 2023.

143 Google Maps. General vicinity of 1499 Old Bayshore Drive. Available: https://www.google.com/maps/@37.5976891,-122.3672421,370m/data=!3m1!1e3?entry=ttu. Accessed November 6, 2023.

levels of all phases. Table 19 below summarizes the construction noise modeling results for this worst-case phase. The provided equipment list, construction noise summary table, and detailed construction noise analysis tables for all phases are provided in Appendix E**.**

Table 19. Reasonable Worst-Case Construction Noise at Nearby Noise-Sensitive Land Uses (Site Preparation/Grading)

Sensitive Receptor	Distance (feet)	Construction Noise Level, L_{eq}, dBA [144]	Nearby Ambient Noise measurement 12-hour $L_{eq, dBA}$	Increase over Ambient
Burlingame Music School	55	82	64.8 [1]	17.2
Avalon Academy	65	81	64.8 [1]	16.2
Bay Landing Hotel	215	70	69.4 [2]	0.6

L_{eq}(h) = hourly equivalent sound level; dBA = A-weighted decibel.

1. 12-hour L_{eq} noise level measured at LT-1a.

2. 12-hour L_{eq} noise level measured at LT-2a.

At a reference distance of 50 feet, site preparation/grading is anticipated to result in a noise level of 82 dBA L_{eq}. Table 19 shows that construction noise levels at nearby noise-sensitive land uses could be in the range of 70 to 82 dBA L_{eq} at the nearest sensitive receptors. These noise levels can be compared to the measured 12-hour average daytime ambient noise levels (L_{eq}) to evaluate the potential noise increase over the ambient noise level that would occur during construction. The 12-hour ambient noise levels near the closest sensitive receptors were 64.8 and 69.4 dBA $L_{eq(12\text{-}hr)}$ at the nearby school and hotel land uses, respectively. Therefore, based on the conservative construction noise assessment, noise from the loudest construction phase (site preparation/grading) could exceed ambient noise levels at nearby noise sensitive land uses (i.e., the Burlingame Music School and Avalon Academy). Note that, at Bay Landing Hotel, modeled noise from the reasonable worst-case loudest construction phase would be similar to the existing ambient noise level (i.e., it would be approximately 1 dB higher than the measured ambient noise).

In addition to typical daytime construction activities, and as described above, limited construction outside of the defined daytime hours for construction may be necessary for large concrete pours, which could start as early as 6:00 a.m. on up to 20 individual construction days. Construction activities besides large concrete pours are not generally expected to occur outside of the typical construction hours for this Project. The three loudest pieces of equipment proposed for concrete pours include two concrete pump trucks and one concrete mixing truck. At a distance of 50 feet, the combined noise level of this equipment is anticipated to be 79 dBA L_{eq}. The Burlingame Music School and Avalon Academy are generally not open during these early morning hours. Therefore, the nearest noise sensitive land use would be considered the Bay Landing Hotel, located approximately 215 feet north of the Project site. At this distance, noise from early morning concrete pours is anticipated to be 66 dBA L_{eq}. Noise at this location during the 6:00 a.m. hour was measured to 68.9 dBA L_{eq}. Consequently, although noise from early morning concrete pours may be audible at the Bay

144 Includes noise from two (2) excavators and one (1) scraper operating simultaneously and near one another on the Project site.

Landing Hotel, it would be unlikely to result in a perceptible (3-dB or greater)[145] noise increase above the existing ambient noise level.

Although noise from this phase of construction may temporarily exceed the existing ambient noise level at nearby sensitive uses, the Municipal Code does not contain numerical thresholds for construction noise during the allowable hours of construction. However, the 2040 General Plan EIR revised Policy CS-4.10 in the Community Safety Element to require all development projects that are subject to discretionary review and located near noise-sensitive land uses to minimize adverse construction noise impacts through noise control measures. Specifically, revised General Plan Policy CS-4.10 requires that:

> Development projects that are subject to discretionary review and that are located near noise-sensitive land uses shall assess potential construction noise levels and minimize substantial adverse impacts by implementing feasible construction noise control measures that reduce construction noise levels at sensitive receptor locations. Such measures may include, but are not limited to: 1) Construction management techniques (e.g., siting staging areas away from noise-sensitive land uses, phasing activities to take advantage of shielding/attenuation provided by topographic features or buildings, monitoring construction n); 2) Construction equipment controls (e.g., ensuring equipment has mufflers, use of electric hook-ups instead of generators); 3) Use of temporary sound barriers (equipment enclosures, berms, walls, blankets, or other devices) when necessary; and 4) Monitoring of actual construction noise levels to verify the need for noise controls.[146]

In summary, there are multiple noise-sensitive receptors in the vicinity of the Project site, the closest of which are approximately 55 and 65 feet away from Project site (the Burlingame Music School and the Avalon Academy, respectively). At these receptors, worst-case construction noise would be up to 82 dBA and 81 dBA, respectively. These estimated noise levels are 16 to 17 dB greater than the existing ambient noise level in these areas. In addition, construction noise levels at the Bay Landing Hotel, located approximately 215 feet from the Project site, were modeled to be up to 70 dBA during typical daytime construction work and 66 dB during early morning concrete pours, noting that existing noise levels near this hotel are generally higher.

The Municipal Code allows for exceptions to the allowable hours for concrete pouring, among other limited reasons. Requests for early starts for concrete pours during construction are generally granted (as long as proper lead time is provided) because concrete needs to set, and concrete pours need to be continuous. In addition, the Project applicant has stated it will work with the City to properly request an exception to allowable construction hours. However, per the General Plan EIR, and because construction noise would be elevated existing ambient noise levels in the vicinity of noise-sensitive receptors, construction noise impacts would be considered significant, and the Project would be required to implement noise control measures consistent with Mitigation Measure 15-1 under the General Plan EIR.[147] Specifically, Mitigation Measure 15-1 requires the implementation of feasible construction noise control measures when development occurs near noise-sensitive land uses. With implementation of the construction noise control plan under **Mitigation Measure NOI-1** (consistent with General Plan EIR Mitigation Measure 15-1), and

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145 The existing ambient noise levels near the hotel (LT-2a, 68.9 dBA L_{eq}) can be added to the modeled construction noise for concrete pouring at the Bay Landing Hotel (66 dBA L_{eq}) to equal a combined noise level of approximately 70.6 dBA L_{eq}, which is less than 3 dB above the background noise level during this hour.

146 City of Burlingame. 2018. *Burlingame 2040 General Plan Draft EIR*. Available: BurlingameGP_DEIR_FullDocument_06-28-2018.pdf (revize.com) Accessed: November 2, 2023.

147 City of Burlingame. 2018. *Burlingame 2040 General Plan Draft EIR*. Available: BurlingameGP_DEIR_FullDocument_06-28-2018.pdf (revize.com) Accessed: November 2, 2023.

because construction would be limited to the allowable hours stated in the construction hours variance expected to be granted by the City (or to allowable hours in the Municipal Code if no variance is granted), construction noise impacts would be reduced to a less-than-significant level. Construction noise impacts would be ***less than significant with mitigation.***

Mitigation Measure NOI-1. Construction Noise Control Plan to Reduce Noise from Project Construction.

To reduce potential noise effects resulting from Project construction, a Construction Noise Control Plan shall be developed to ensure feasible construction noise control measures are implemented to reduce construction noise at nearby sensitive land uses. The Construction Noise Control Plan, to be developed by the Project applicant, would include certain noise reduction measures, such as the following.

- Using smaller equipment with lower horsepower when working near noise-sensitive land uses or reducing the hourly utilization rate of equipment used on the site.
- Locating construction equipment and equipment staging areas as far as feasible from noise-sensitive uses.
- Locating stationary construction equipment, such as generators or pumps, as far as feasible from noise-sensitive land uses.
- Requiring that all construction equipment powered by gasoline or diesel engines have sound control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Prohibiting gasoline or diesel engines from having unmuffled exhaust systems.
- Not idling inactive construction equipment for prolonged periods (i.e., more than 5 minutes).
- Constructing a solid plywood barrier around the construction site and adjacent to nearby noise-sensitive land uses.
- Using temporary noise control blankets or barriers along the project construction fence.
- Using “quiet” gasoline-powered compressors or electrically powered compressors and electric rather than gasoline- or diesel-powered forklifts for small lifting.

Construction Haul Truck Noise

Haul and vendor trucks would be used for mobilization and demobilization of construction equipment and materials. Trucks would access the Project site by exiting US 101 onto Old Bayshore Highway and travel north to Mahler Road West of Old Bayshore Highway to access the Project site. When leaving the Project site, trucks would exist directly onto Old Bayshore Highway and travel to Broadway, where the trucks would access US 101.

On a worst-case day, the Project applicant has stated approximately 85 one-way truck trips would be made during Project construction.[148] Haul truck and vendor truck were added to existing traffic volumes provided by the Project traffic engineer (Kettleson) to determine if a 3-dB increase in noise from existing conditions, considered to be "barely perceptible," would occur along the roadway segments used for hauling. Modeling demonstrated that the largest noise increase along any roadway segment where hauling would occur would be 1.8 dB, which is below the established 3-dB "barely perceptible" noise increase threshold. Refer to Appendix E for the full haul truck noise modeling results. Impacts related to construction truck noise would be considered ***less than significant***.

Operational Traffic

Project traffic noise effects along nearby roadway segments resulting from Project development were quantitatively modeled using average daily traffic, posted speeds, and existing vehicle-mix assumptions (i.e., the proportion of automobiles, trucks, buses, and other vehicles) provided by the Project traffic engineer (Kittelson). Traffic volumes were provided for existing, existing plus project, cumulative no project, and cumulative plus project conditions. Quantitative modeling of traffic noise from the Project was conducted using a spreadsheet that was based on the FHWA Traffic Noise Model, version 2.5. The spreadsheet calculates the traffic noise level at a fixed distance from the centerline of a roadway (50 feet for this analysis) according to the traffic volume, roadway speed, and vehicle mix predicted to occur under each condition.

When assessing direct traffic noise impacts, the following thresholds are applied to determine the significance of Project-related traffic noise increases.

1. An increase of more than 5 dBA is considered a significant traffic noise increase, regardless of the existing ambient noise level.
2. In places where the existing or resulting noise environment is "conditionally acceptable," "normally unacceptable," or "clearly unacceptable," based on the City Land Use Compatibility Guidelines, any noise increase greater than 3 dBA is considered a significant traffic noise increase.

Traffic noise was evaluated in terms of how Project-related traffic noise increases could affect existing noise-sensitive land uses in the Project area. According to the General Plan Community Safety chapter, the normally acceptable outdoor noise levels for school, public, quasi-public, and residential land uses is 60 dBA CNEL. Refer to Table 20 for a summary of the traffic noise modeling results; refer to Appendix E for the full traffic noise modeling results.

[148] Eighty-five one-way truck trips include trucks arriving to the Project site and exiting the project site to access US 101. Only inbound trucks would access the site via Mahler Road West of Old Bayshore Highway. Therefore, 43 trucks were added to Mahler Road West of Old Bayshore Highway during modeling.

Table 20. Modeled Traffic Noise Levels for Existing Conditions

Roadway	Segment Location	Existing dBA CNEL	Existing plus Project dBA CNEL	Change (dB)
Old Bayshore Highway	North of Hinckley Rd	67.0	67.4	0.5
Old Bayshore Highway	Hinckley Rd to Mahler Rd	67.1	67.6	0.5
Old Bayshore Highway	Mahler Rd to US 101 NB Ramps	66.8	67.7	0.8
Old Bayshore Highway	US 101 NB Ramps to Broadway	70.0	70.3	0.3
Broadway	Old Bayshore Hwy to US 101 SB Ramps	64.7	65.0	0.2
Broadway	South of US 101 SB Ramps	66.3	66.4	0.1
Hinkley Road	West of Old Bayshore Hwy	54.2	54.2	0.0
Mahler Road	**West of Old Bayshore Hwy**	**55.0**	**59.1**	**4.1**

dBA (A-weighted decibel; CNEL: Community Noise Equivalent Level; dB = decibel; NB = northbound; SB = southbound.
Note: Modeled noise levels at a fixed distance of 50-feet from the roadway centerline.

As shown in Table 20, one roadway segment was modeled to experience a 3-dB or greater increase in traffic noise due to the Project. However, modeling of both the existing and existing plus project conditions demonstrate that modeled traffic noise levels would be lower than the 60 dBA CNEL normally acceptable outdoor noise levels for school land uses (the only noise-sensitive use located along this roadway segment). Due to this, Project-related traffic noise can increase by up to 5 dBA according to the traffic noise thresholds described previously. A 5-dB increase is not modeled to occur as shown in Table 20 (with traffic noise on Mahler Road west of Old Bayshore Highway modeled to increase by 4.1 dB from existing conditions). In addition, the existing measured CNEL noise levels along this roadway segment were between 67 and 68 dBA CNEL (per the LT-1a and LT-1b noise measurement locations). Because no analyzed roadway segments were modeled to experience a significant traffic noise impact as a result of Project implementation, Project traffic noise impacts would be ***less than significant***.

Cumulative traffic noise was also evaluated to determine if cumulative traffic noise impacts would occur in the Project vicinity, and if the Project would contribute considerably to an identified cumulative traffic noise impact. A potential cumulative traffic noise impact is identified if a 3 dB increase in noise would occur from existing to cumulative plus project conditions. If a 3 dB increase is identified, cumulative no project and cumulative plus project traffic noise modeling results are compared to determine if the Project is responsible for a 1 dB or greater increase in traffic noise. Refer to Table 21 for the cumulative traffic noise modeling results.

Table 21. Modeled Traffic Noise Levels for Cumulative Conditions

Roadway	Segment Location	Existing dBA CNEL	Cumulative plus Project dBA CNEL	Change (dB)
Old Bayshore Highway	North of Hinckley Rd	67.0	69.1	2.1
Old Bayshore Highway	Hinckley Rd to Mahler Rd	67.1	69.3	2.2
Old Bayshore Highway	Mahler Rd to US 101 NB Ramps	66.8	69.4	2.6
Old Bayshore Highway	US 101 NB Ramps to Broadway	70.0	71.4	1.3
Broadway	Old Bayshore Hwy to US 101 SB Ramps	64.7	65.6	0.8
Broadway	South of US101 SB Ramps	66.3	67.0	0.7
Hinkley Road	West of Old Bayshore Hwy	54.2	55.9	1.7
Mahler Road	**West of Old Bayshore Hwy**	**55.0**	**60.1**	**5.1**

dBA (A-weighted decibel; CNEL: Community Noise Equivalent Level; dB = decibel.
Note: Modeled noise levels at a fixed distance of 50-feet from the roadway centerline.

Table 21 shows that one roadway segment would result in a 3 dB or greater increase in traffic noise from existing to cumulative plus project conditions. Specifically, traffic noise along Mahler Road West of Old Bayshore Highway was modeled to have a cumulative traffic noise increase of 5.1 dB from existing modeled conditions, resulting in a modeled cumulative plus project noise level of 60.1 dBA CNEL. However, note that ambient noise along this segment of Mahler Road was measured to be 67.0 dBA CNEL. Existing ambient noise levels are therefore approximately 7 dB higher than the modeled cumulative plus project traffic noise level. A more detailed evaluation of the potential cumulative impact along this segment can be done with consideration given to the existing measured ambient noise level. Refer to Table 22 for the results of this more detailed assessment.

Table 22. Modeled Traffic Noise Levels for Cumulative Conditions

Roadway	Segment Location	Measured Existing Ambient Noise dBA CNEL	Modeled Cumulative Plus Project (minus Existing volumes) dBA CNEL	Measured Existing Ambient and Cumulative Plus Project Noise dBA CNEL	Increase over Ambient (dB)
Mahler Road	West of Old Bayshore Hwy	67.0 [a]	64.3	68.9 [b]	1.9

dBA (A-weighted decibel; CNEL: Community Noise Equivalent Level; dB = decibel.
Note: Modeled noise levels at a fixed distance of 50-feet from the roadway centerline

[a] Existing ambient noise level measured at LT-1b.

[b] Logarithmic addition was completed using ambient noise measured at LT-1b and modeled noise levels using the difference in ADT volumes between Cumulative Plus Project and Existing conditions. Modeling this additional condition prevents double counting existing traffic noise as it is represented in the measured ambient noise level from LT-1b.

As shown in Table 22, actual existing noise along this segment is louder than modeled noise along this segment because other nearby roadways (i.e., Old Bayshore Highway) also affect the measured noise in this area. Measured noise along Mahler Road west of Old Bayshore Highway was in the range of 67 to 68 dBA CNEL (per measurements LT-1a and LT-1b), which is approximately 7-dB louder than the modeled cumulative plus project noise level. An estimated cumulative plus project

noise level based on measured existing noise and modeled cumulative plus project (minus existing traffic volumes) noise was also generated. As shown in Table 22, the estimated combined noise level from existing measured noise and noise from cumulative plus project traffic volumes is approximately 68.9 dBA CNEL. This noise level is only 1.9 dB greater than the existing measured conditions along this segment (67.0 dBA CNEL at LT-1b). Because a 3-dB increase over existing (ambient) conditions would not be expected to occur, cumulative traffic noise impacts along this segment would be less than significant.

In summary, direct and cumulative traffic noise increases would not exceed the allowable noise increase thresholds, and traffic noise impacts would be ***less than significant.***

Mechanical HVAC Equipment

The Project would involve the use of HVAC systems and equipment. Although the makes and models of Project mechanical equipment are not yet finalized, the Project applicant has identified various equipment types that are expected to be located on the roof area of the Project building. The equipment installed on the building's roof would be typical for these types of R&D uses. In addition, the Project area is already developed with similar commercial and industrial land uses that also include heating and cooling equipment.

Based on the currently available Project details, the rooftop equipment is expected to consist of two air handling units, one electric boilers, one air cooled chillers, four heat pumps, six chilled water pumps, six heating hot water pumps, and 13 exhaust fans. The makes and models of equipment have not yet been selected, and it is possible the numbers or types of equipment may change. Therefore, an example analysis has been conducted to estimate possible noise levels from rooftop equipment, noting that actual noise levels may vary depending on the factors described here.

In general, air handling units can produce sound levels in the range of 70 to 75 dBA at 50 feet, depending on the size of the unit.[149] A typical boiler generates a sound power level in the range of 96 to 99 dBA,[150] which equates to a noise level of 64 to 67 dBA at 50 feet. Depending on cooling capacity, a chiller generates a sound power level of 97 to 103 dBA, which equates to a noise level of 65 to 71 dBA at 50 feet.[151] Pumps generate noise levels at 50 feet of approximately 81 dBA, and exhaust/ventilation fans generate noise levels at 50 feet of approximately 79 dBA.[152]

Although exact numbers, makes, models, sizes, and locations for the proposed mechanical equipment are not finalized at this time, an example case of combined noise levels was modeled. This analysis evaluates combined noise levels from a select number of units that could be installed under the Project and conservatively assumed that all modeled pieces of equipment on the proposed building would be located relatively close to one another. Although more equipment than evaluated could be installed under the Project, overall noise levels would be generally dominated by the closest and loudest equipment. In addition, equipment located further from the edge of the Project building's roof would be somewhat blocked by equipment located close to the edge of the roof, resulting in a form of shielding that would attenuate noise. The edge of the roof itself would also reduce equipment noise experienced by noise-sensitive uses located closer to the ground level of the

149 Hoover and Kieth. 2000. Noise Control for Buildings, Manufacturing Plants, Equipment, and Products. Houston, TX.

150 ibid.

151 ibid.

152 Federal Highway Administration. 2006. Roadway Construction Noise Model User Guide.

approximately 148-foot-tall Project building. As a result, the example analysis provides a reasonable estimate of combined noise levels from Project equipment at the nearest sensitive uses.

According to the Project applicant, all rooftop equipment would be surrounded by screened walls to hide it from view. As a result, a noise reduction of approximately 5 dB was assumed for equipment located behind a mechanical screen in the model. Additional attenuation would occur from the Project building itself because the equipment would be 148 feet above the ground, and the nearest noise-sensitive land uses are one-story buildings, and an estimated 15-feet tall (i.e., the Burlingame Music School and Avalon Academy). Therefore, the edge of the Project roof for the Project building where the equipment would be located would be expected to block the line of sight between most mechanical equipment and these nearby schools, resulting in a reduction in mechanical equipment noise. An additional 5 dB of noise reduction (or 10 dB total) is conservatively assumed for this shielding, although a greater noise reduction is likely.

Modeled combined noise from the example case described above is compared to the maximum allowable outdoor noise level of 60 dBA during daytime hours (7:00 a.m. to 10:00 p.m.), or 50 dBA during nighttime hours (10:00 p.m. and 7:00 a.m.), as measured at the property line, to determine if significant impacts related to mechanical equipment noise would occur. Combined noise levels from one boiler, one chiller, six pumps, two air handlers, and six exhaust fans would result in an estimated noise level of 86.2 dBA Leq at a reference distance of 50 feet. The nearby Burlingame Music School and Avalon Academy are located approximately 110 and 115 feet away from the proposed Project building, without accounting for the height difference between the rooftop equipment and the school. When accounting for the height difference, the equipment would be at least 170 feet from these nearby noise-sensitive land uses, noise would be approximately 74.2 dBA Leq when considering the aforementioned 10-dB of reduction that is conservatively applied.153 The Bay Landing Hotel (which is four stories high) is located approximately 250 feet from the Project building. When considering the estimated heigh difference between this hotel and the Project building,154 project mechanical equipment would be at least 265 feet from this sensitive use. At a distance of 265 feet, estimated combined equipment noise levels based on the assumptions above would be approximately 70.5 dBA Leq, from the example case. Refer to Table 23 for a summary of equipment noise modeling for this example case. Although mechanical equipment may be running during both the daytime and nighttime hours, cooling equipment is typically used (and associated compressor noise typically generated) more frequently during daytime hours when temperatures are generally hotter. Combined mechanical equipment noise is therefore compared to the average daytime (12-hour) noise level measured at nearby noise-sensitive land uses.

153 The hypotenuse was calculated via $A^2 + B^2 = C^2$, where A is a 110-foot horizontal distance between the nearest receptor and the Project building, and B is the height difference between the project building (148 feet) and the nearest sensitive receptor (~15 feet). In this instance, $(110)^2 + (133)^2 = (173)^2$, resulting in an actual distance between Project equipment and the nearest receptor of over 170 feet.

154 The hypotenuse was calculated via $A^2 + B^2 = C^2$, where A is a 250-foot horizontal distance between the Bay Landing Hotel and the Project building, and B is the height difference between the Project building (148 feet) and the hotel (~60 feet). In this instance, $(250)^2 + (88)^2 = (173)^2$, resulting in an actual distance between Project equipment and the nearest receptor of over 265 feet.

Table 23. Combined Mechanical Equipment Noise

Type of Equipment	dBA L_{eq} Noise at 50 Feet (Assuming 100% utilization)	Number of Pieces of Equipment Assumed	Combined Noise Level	Attenuated Noise [a]	Source for Estimated Equipment Noise
Boiler	67	1	67	57	H&K
Chiller	71	1	71	61	H&K
Pump	81	6	89	79	FHWA
Air handling unit	75	2	78	68	H&K
Exhaust fan	79	6	87	77	FHWA
Combined Equipment Noise at 50 feet					**81.2 dBA L_{eq}**
Combined Equipment Noise at 173 feet (Burlingame Music School)					**70.4 dBA L_{eq}**
Combined Equipment Noise at 175 feet (Avalon Academy)					**70.3 dBA L_{eq}**
Combined Equipment Noise at 265 feet (Bay Landing Hotel)					**66.7 dBA L_{eq}**

Sources:

Hoover and Keith. 2000. Noise Control for Buildings, Manufacturing Plants, Equipment, and Products. Houston, TX.

Federal Highway Administration. 2006. FHWA Roadway Construction Noise Model User's Guide. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: August 17, 2023.

dBA = A-weighted decibel; Leq = hourly equivalent sound level; H&K = Hoover and Keith; FHWA = Federal Highway Administration.

a. Assumes 10 dB of reduction because equipment is located behind a solid screen, and because of the edge of the roof blocking the line of sight to the nearest noise-sensitive uses.

At the nearby Bay Landing Hotel, equipment noise was estimated to be approximately 66.7 dBA L_{eq}. The daytime average noise level at this location was measured to be 69.4 dBA L_{eq} (12-hour); therefore, mechanical equipment would be unlikely to result in a substantial temporary increase in noise at this location.

At the nearby Avalon Academy and Burlingame Music School, the existing daytime noise level was measured to be approximately 64.8 dBA L_{eq}. Therefore, the combined noise level for mechanical equipment at this location (70.4 dBA L_{eq}) would be approximately 5-dB greater than the existing daytime ambient noise levels.[155] Note that additional noise reduction beyond the 5-dB cited above would likely be achieved via the roof edge blocking the line of sight from the equipment to the nearest sensitive use. However, final equipment has not yet been selected. As a result, should more equipment be operational simultaneously than assumed in the example analysis, or should noise levels of individual equipment be louder than the example equipment modeled above, actual noise levels may be louder than these estimated noise levels. Therefore, based on the example analysis presented herein, and because equipment selections are not yet final, it is possible that Project equipment noise levels would exceed allowable noise levels of 60 dBA L_{eq} during daytime hours or 50 dBA L_{eq} during nighttime hours. For the reasons described above and based on the modeling results shown in **Table 23**, noise impacts from Project mechanical equipment noise would be considered significant.

155 12-hour L_{eq} noise levels were calculated for daytime hours (7:00 a.m. to 7:00 p.m.). The existing ambient noise level of 64.8 dBA $L_{eq(12\text{-}hour)}$ was measured at LT-1a (near the Avalon Academy and Burlingame Music School). The existing ambient noise level of 69.4 dBA $L_{eq(12\text{-}hour)}$ was measured at LT-2a (near the Bay Landing Hotel).

Implementation of Mitigation Measure NOI-2 would ensure that additional analysis was conducted once mechanical equipment numbers, makes and models are final to confirm compliance with applicable local noise standards. Impacts related to mechanical equipment noise would be ***less than significant with mitigation***.

Mitigation Measure NOI-2. Reduce Noise from Project Mechanical Equipment.

To reduce potential noise effects resulting from Project mechanical equipment, including heating, cooling, and ventilation equipment as well as project emergency generators, an operational equipment noise analysis shall be prepared (once final makes, models and design features of associated equipment are selected) to confirm actual noise levels of project-specific equipment will comply with applicable local noise standards. The analysis shall be conducted prior to the issuance of building permits and shall be prepared by persons qualified in acoustical analysis and/or engineering and shall demonstrate with reasonable certainty that the mechanical equipment selected for the project will not result in an exceedance of the applicable City noise standards of 50 dBA L_{eq} during nighttime hours and 60 dBA L_{eq} during daytime hours.

Options to reduce noise from mechanical equipment include the following.

- Enclosing equipment in mechanical equipment rooms.
- Shielding equipment with mechanical screens, walls or barriers at least as tall as the equipment.
- Selecting quieter equipment and/or emergency generator models.
- Incorporating weather enclosures and/or exhaust silencers or filters into emergency generator design.

All recommendations from the acoustical analysis necessary to ensure that noise sources meet the above standards shall be incorporated into the building design and operations.

Emergency Generator Testing

The Project would include four 600-kilowatt (kW) emergency generators which would be located in an exterior generator yard near the southwest corner of the Project building. Although noise from the operation of emergency generators during an emergency is typically exempt from local ordinances, noise during generator testing must comply with local noise limits for operational equipment noise. Chapter 25.31 of the Municipal Code states that noise from mechanical equipment is limited to 60 dBA during daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA during nighttime hours (10:00 p.m. to 7:00 a.m.), as measured at the property line.

According to the Project applicant, each generator would be tested once per month for 30-minutes and may also be tested for 4 hours once per year. Note that only one generator would be operated at a given time during tests.

Although the precise makes and models of the 600-kW generators have not been finalized, noise from a Cummins 600DQCA can be used to approximate generator noise levels during testing. A Cummins 600dQCA generator can produce an estimated unattenuated noise level of up to 99.7 dBA L_{eq} at a distance of 50 feet including both engine and exhaust noise. This noise level does not account

for any attenuation that may result from exhaust mufflers or weather and/or sound enclosures, since attenuation features for Project generators have not yet been identified.[156]

Because the generator yard would be located on the south side of the Project site, it would not be located adjacent to any noise-sensitive land uses. The nearest noise-sensitive land use is the Avalon Academy, which is located approximately 270 feet from the proposed generator yard on the other side of the Project buildings. At this distance, without accounting for attenuation from the intervening building or potential weather enclosures and exhaust mufflers, the testing of one unattenuated 600-kW generator is anticipated to result in a noise level of approximately 85 dBA L_{eq}. Shielding from the intervening building could reduce generator testing noise substantially; however, some noise could flank around the building. Therefore, up to 10 dB of noise reduction is conservatively assumed from this building, resulting in an estimated noise level from generator testing of 75 dBA L_{eq} at Avalon Academy, the nearest school. This estimated noise level is approximately 15 dB greater than the allowable 60 dBA L_{eq} daytime threshold during daytime hours, noting that emergency generator testing would not take place during nighttime hours. Although this would be temporary (taking place for up to 30 minutes at a time) and intermittent (occurring for approximately 12 to 13 times per year), the noise level still may exceed the City's quantitative limits. Noise impacts from emergency generator testing would be significant, and mitigation would be required.

Implementation of recommended Mitigation Measure NOI-2 would require that mechanical equipment, including heating, cooling and ventilation equipment as well as emergency generators, be oriented, located, and designed in such a way to reduce noise to below the applicable City thresholds. With implementation of this mitigation, noise from emergency generator testing would not exceed the allowable below 60 dBA daytime standard. Noise impacts from emergency generators would be ***less than significant with mitigation.***

Loading Dock Noise

Once operational, there is a potential for limited truck deliveries at the Project site. However, it is expected that there would only be up to one daily truck delivery to the site, excluding small truck deliveries such as UPS and FedEx. In addition, shielding from the Project building would prevent a direct line-of-sight between loading dock activities and nearby noise sensitive receptors, reducing the loading dock noise. The Project site is located in the I/I zoning area of Burlingame which contains existing commercial and industrial land uses; because of this, and because of nearby traffic along major thoroughfares, the existing ambient noise levels in the Project vicinity are already somewhat elevated. For example, ambient noise levels along Mahler Road were measured to be 68 and 67 dBA CNEL at measurement locations LT-1a and LT-1b, respectively. Similarly, along Old Bayshore Highway, the existing ambient noise level was 72 dBA CNEL at the LT-2a measurement location. In addition, and regarding daytime noise levels, the 12-hour average L_{eq} (daytime) noise level at these locations were approximately 65 dBA $L_{eq(12\text{-hour})}$ at both LT-1a and LT-1b, and 69 dBA $L_{eq\ (12\text{-hour})}$ at LT-2a.

156 Cummins Inc. 2018. *Sound Data: Diesel Generator Set 600DQCA engine.* Available: https://cummins.seismic.com/app/#/doccenter/98546701-e938-403b-9578-7168bbaba4b3/doc/%252Fdd3d1538ff-8aed-27d9-165a-1bfae7187f4f%252Fddf4d53702-9840-4f1f-5632-63c349d71499%252Flff87f20f7-f4e6-45e9-ad53-895db6aaf9b3//?mode=view&parentPath=sessionStorage. Accessed: August 23, 2023.

Because existing ambient noise levels are somewhat elevated in the Project vicinity, and because there would be very few truck trips to the Project site (i.e., an estimated one truck trip per day to the Project site), the temporary and intermittent noise from infrequent loading dock activities would not result in a substantial temporary increase in noise at the nearest sensitive land uses. Noise impacts from loading dock activity would be ***less than significant***.

b. Generate excessive groundborne vibration or groundborne noise levels?

Chapter 8 of the 2040 General Plan, *Community Safety*, states that a vibration impact assessment is required for proposed projects in which heavy-duty construction equipment would be used within 200 feet of existing structure or sensitive receptors.[157] Therefore, vibration from construction-related activities at the Project site is evaluated to determine if potential impacts related to structural damage or human annoyance/sleep disturbance would be expected. Vibration levels at nearby receptors from construction activities are calculated using the source vibration levels and attenuation equation of PPV = PPV_{ref} x $(25/distance)^{1.5}$ from the FTA guidance.[158] In the absence of specific local numerical construction vibration thresholds, calculated values are compared to the California Department of Transportation (Caltrans) structural damage criteria, which vary according to structure type, and the Caltrans annoyance criteria. These criteria are shown in Table 24 and Table 25, below.

Table 24. Vibration Damage Potential Threshold Criteria Guidelines

	Maximum PPV (inches per second)	
Structure and Condition	**Transient Sources**	**Continuous/Frequent Intermittent Sources**
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual*. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed August 7, 2023.

PPV = peak particle velocity.

Note: Transient sources create a single, isolated vibration event (e.g., blasting or the use of drop balls). Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

157 City of Burlingame. 2019. *Envision Burlingame 2040 General Plan*. Chapter VIII, Community Safety, Figure CS-2: Noise Criteria. Page CS-17. January. Available: BurlingameGP_Final_Nov2019_Chapter 8 (Safety).pdf (revize.com). Accessed November 2, 2023.

158 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, FTA Report No. 0123, 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed August 7, 2023.

Table 25. Vibration Annoyance Potential Criteria Guidelines

Human Response	Maximum PPV (inches per second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual*. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed August 7,2023.
PPV = peak particle velocity.
Note: Transient sources create a single, isolated vibration event (e.g., blasting or the use of drop balls). Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Many of the land uses surrounding the Project site are commercial and industrial uses. There are also neighboring institutional land uses and transient lodging within the Project vicinity. The nearest surrounding structures would be categorized either as historic and some old buildings, due to the age of the structures, or as Modern commercial and industrial buildings. Per the Caltrans *Vibration Damage Potential Threshold Criteria Guidelines*, historic and some old buildings have a PPV damage threshold of 0.3 in/sec. Modern industrial or commercial buildings have a PPV damage threshold of 0.5 in/sec. Typical vibration levels associated with heavy-duty construction equipment that would be used for the Project are shown in Table 26 at a reference distance of 25 feet and other distances. The most vibration-intensive equipment proposed for this Project includes an auger drill (for the installation of piles) and earthmoving equipment, such as a large bulldozer or excavator (which is represented by a large bulldozer below). At a reference distance 25 feet, the most vibration-intensive equipment proposed for use with the Project would produce a PPV vibration level of 0.089 in/sec, as shown in Table 26.[159]

Table 26. Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet	PPV at 30 Feet	PPV at 55 Feet	PPV at 65 Feet
Auger drill	0.089	0.068	0.027	0.021
Large bulldozer [a]	0.089	0.068	0.027	0.021
Small bulldozer [b]	0.003	0.002	0.001	0.001

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, FTA Report No. 0123, 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed August 7, 2023.
PPV = peak particle velocity.
[a] Representative large earthmoving equipment, such as an excavator and front-end loader.
[b] Representative of small earthmoving equipment, such as a backhoe, skid steer, and mini excavator.

[159] California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual*. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed August 7,2023.

Damage

Regarding potential vibration-related damage impacts, the nearest structure to the Project site is a commercial office building located approximately 30 feet from the western Project site boundary. Based on the structure age, type and condition of this structure, it would likely be categorized as a historic or some old buildings (which has an applicable vibration-related damage threshold of 0.3 PPV in/sec). At a distance of 30 feet from construction activities conducted with an auger drill, excavator or large bulldozer, the estimated vibration level would be 0.068 PPV in/sec. Because this vibration level is well below the damage criterion of 0.3 PPV in/sec that would apply to this nearby structure, and vibration levels at further distances would be even lower, vibration from construction of the proposed Project is not anticipated to result in any damage impacts to nearby structures. For these reasons, vibration-related damage impacts would be considered ***less than significant***.

Annoyance

Regarding the potential for annoyance-related vibration impacts to occur, residential land uses are considered to be most sensitive to vibration during nighttime hours when, generally, people are asleep. The nearest land uses where people sleep to the Project site is the Bay Landing Hotel located north of the Project site. Although most Project construction would take place during daytime hours, the project is estimated to have up to 20 instances of early morning concrete pours over the 10-month period when the building exterior and parking structure pour sequence phases occur. Early morning concrete pours would begin as early as 6:00 a.m. on these days. For the purposes of this analysis, should vibration from project construction equipment exceed the Caltrans "strongly perceptible" vibration level of 0.1 PPV in/sec prior to the allowed/typical hours for construction in the City, a potential significant vibration-related annoyance impact could occur.

Equipment proposed to complete concrete pours includes concrete mix trucks and concrete pump trucks. This equipment is generally low vibration levels (i.e., less vibration than a small bulldozer shown in Table 26) as it does not impart energy into the ground. The nearest land use where people sleep is the Bay Landing Hotel located approximately 215 feet north of the Project site. At this distance, small equipment (similar to a small bulldozer) would produce an estimated vibration level of 0.001 PPV in/sec. This is well below the strongly perceptible criterion of 0.1 PPV in/sec. Therefore, vibration related annoyance impacts to this hotel would be less than significant.

In addition to the hotel, which would be considered sensitive to vibration during nighttime and early morning hours, there are also two educational facilities located west of the Project site. These schools may experience annoyance due to vibration during typical daytime construction hours. The Burlingame Music School and Avalon Academy are approximately 55 and 65 feet from the Project site. These schools are typically open beginning at 8:00 a.m. Vibration levels during daytime hours at these nearby schools are estimated in order to assess the potential for vibration-related annoyance impacts to occur at these land uses.

During daytime hours, the most vibration intensive equipment that is proposed for use are an auger drill rig and a large bulldozer or excavator (which is represented by a large bulldozer). At a distance of 55 feet, vibration levels from a large bulldozer and auger drill would be approximately 0.027 PPV in/sec. At a distance of 65 feet, the estimated vibration level is approximately 0.021 PPV in/sec. At both of these distances, vibration from this equipment would be below the Caltrans "strongly perceptible" criterion of 0.1 PPV in/sec. In addition, these estimated vibration levels are also below the Caltrans "barely perceptible" criterion of 0.04 PPV in/sec. Therefore, construction is not anticipated to result in excessive annoyance at the nearby educational facilities.

Because vibration from project construction would not be expected to exceed the applicable vibration-related annoyance criteria at nearby sensitive uses, vibration-related annoyance impacts would be ***less than significant.***

c. Be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?

The closest public airport to the Project site is SFO, which is located approximately 0.9 miles northwest of the project site. Since this airport is within a 2-mile radius of the Project, the 2012 ALUCP for the San Franscisco International Airport was reviewed.[160] The Project site is not located within any evaluated noise contours, including the 65 dB CNEL noise contour, for this airport. Based on the ALUCP, commercial land uses (which includes offices, business, and professional uses), such as the Project, are considered compatible with all noise levels. In addition, there are no private airstrips within 2 miles of the Project site. Therefore, the Project would not expose people working or residing in the Project area to excessive noise levels resulting from either a public or public use airport, nor a private airstrip. Impacts related to aircraft noise would be ***less than significant.***

[160] City/County Association of Governments of San Mateo County. Redwood City, California, *Comprehensive Airport Land Use Compatibility Plan For the Environs of San Francisco International Airport*. Available: https://ccag.ca.gov/wp-content/uploads/2014/10/Consolidated_CCAG_ALUCP_November-20121.pdf

XIV. Population and Housing

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

Setting

For the following population and housing discussion, the ABAG's *Projections 2040* from 2018 is relied on as it is the most recent data set that provides City-level detail. The projections report for 2050 no longer provides data for cities, but rather provides regional-level data. Similarly, the American Community Survey 2017–2021, 5-year estimates, released December 2022 provides the most recent local-level census data set.

Population. The American Community Survey estimates that the City had a population of 31,142 in 2021.[161] Table 27 shows ABAG population projections for the City, county, and Bay Area as a whole. As shown, the City population will increase by approximately 1,075 (3.6%) by 2025. Projections also indicate that population growth in Burlingame will exceed population growth in the county (2.5%) between 2020 and 2025 but be less than that of the Bay Area as a whole (4.6%).[162]

Table 27. Population Projections (2020 to 2025)

	2020	2025	Growth (2020–2025)
City of Burlingame	29,975	31,050	1,075 (3.6%)
San Mateo County	796,925	816,460	19,535 (2.5%)
San Francisco Bay Area	7,920,230	8,284,200	395,970 (4.6%)

Source: Association of Bay Area Governments. 2018. *Projections 2040.*

[161] U.S. Census Bureau. 2017-2021. *ACS Demographic and Housing Estimates, Burlingame, California.* American Community Survey 5-year Estimates. ID DP05. Accessible: https://data.census.gov/table?t=Populations+and+People&g=160XX00US0609066&y=2021&tid=ACSDP5Y2021.DP05. Accessed August 28, 2023.

[162] Association of Bay Area Governments. 2018. *Plan Bay Area Projections 2040: A Comparison to Plan Bay Area 2040.* November. Available: http://projections.planbayarea.org/. Accessed: August 17, 2023.

Housing. In 2021, the estimated number of housing units in the City was 13,188, with an average size of 2.36 persons per household.[163] That same year, the City had a housing vacancy rate of approximately 5.8 percent (770 units).[164] It also had an estimated 17,709 employees, resulting in approximately 1.36 workers per household.[165]

Table 28 presents ABAG projections for households in the city, county, and Bay Area for 2020 to 2025. The number of households in the City is projected to grow from approximately 12,755 in 2020 to 13,190 units in 2025, an increase of approximately 3.4%. According to ABAG, the number of households in the county is projected to grow by approximately 2.1%, while the Bay Area is expected to grow by approximately 4.4% in 5 years.[166]

Table . Household Projections (2020 to 2025)

	2020	2025	Growth (2020–2025)
City of Burlingame	12,755	13,190	435 (3.4%)
San Mateo County	284,260	290,330	6,070 (2.1%)
San Francisco Bay Area	2,881,965	3,009,055	127,090 (4.4%)

Source: Association of Bay Area Governments. 2018. *Projections 2040.*

Employment. Table 29 presents ABAG projections for the number of jobs in the city, county, and Bay Area for 2015 and 2020. The number of jobs in the City is projected to increase by approximately 0.4 percent because of employment increases in the retail, government, construction, education, and financial sectors; decreases are projected in the manufacturing, wholesale, and transportation sectors. Overall, job growth in the City (0.4 percent) is expected to be lower than job growth in the county (4.0 percent) or the Bay Area (3.2 percent).[167] In Burlingame, the industries with the highest employment levels are educational and healthcare services, professional and scientific services, retail trade, and manufacturing, representing nearly one-half of the jobs in the City.

163 U.S. Census Bureau. 2017-2021. *ACS Demographic and Housing Estimates, Burlingame, California.* American Community Survey 5-year Estimates. ID DP05. Accessible: https://data.census.gov/table?t=Populations+and+People&g=160XX00US0609066&y=2021&tid=ACSDP5Y2021.DP05. Accessed August 28, 2023.

164 U.S. Census Bureau. 2021. *Selected Housing Characteristics, Burlingame, California.* American Community Survey 5-year Estimates. ID DP04. Accessible: https://data.census.gov/table?q=DP04:+SELECTED+HOUSING+CHARACTERISTICS&tid=ACSDP1Y2021.DP04. Accessed August, 18, 2023.

165 U.S. Census Bureau. 2021. *Selected Economic Characteristics, Burlingame, California*. The 2017–2021 American Community Survey, 5-year Estimates, Data Profiles. ID DP03. Available: https://data.census.gov/table?q=DP03&g=040XX00US06_160XX00US0609066&y=2021&tid=ACSDP5Y2021.DP03/. Accessed: August 24, 2023.

166 Association of Bay Area Governments. 2018. *Plan Bay Area Projections 2040: A Comparison to Plan Bay Area 2040.* November. Available: http://projections.planbayarea.org/. Accessed: August 17, 2023.

167 ibid.

Table . Job Projections (2020 to 2025)

	2020	2025	Growth (2020–2025)
City of Burlingame	32,335	32,465	130 (0.4%)
San Mateo County	399,275	415,305	16,030 (4.0%)
San Francisco Bay Area	4,136,190	4,267,760	131,570 (3.2%)

Source: Association of Bay Area Governments. 2018. *Projections 2040.*

Burlingame can be characterized as a "job rich" community where there are more jobs than employed residents. This leads to greater demand for housing and, in turn, higher prices for both rental and housing costs. The number of housing units constructed in Burlingame is substantially below housing growth in the rest of San Mateo County, and given high job growth in the County, home sales prices and rental prices in Burlingame have increased significantly.[168] Because Burlingame's housing prices and rents are high, many people who work in the City cannot afford to live there. Consequently, people who work in Burlingame often commute from elsewhere. As of 2021, approximately 0.25% of the people who currently work in Burlingame also live in the City, not including people who work from home.[169,170,171]

The Project site is developed and currently occupied by two existing two-story office buildings and one existing one-story warehouse building; both office buildings are vacant. No individuals currently reside at the Project site.

Discussion

a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

Construction. Construction of the Project would increase construction employment directly; however, this would be temporary, occurring only during the 3-year construction period. The size of the construction workforce would vary during the different phases of construction. The average number of construction workers per day would be approximately 90; the maximum number of construction workers on a peak day would be approximately 150. Given the relatively common nature of the anticipated construction, the demand for construction employment would most likely be met with the existing and future labor market in the City as well as San Mateo County. A

168 City of Burlingame. 2023. *City of Burlingame 2023–2031 Housing Element*. Available: https://cms6.revize.com/revize/burlingamecity/document_center/Planning/Draft%202023-2031%20Housing%20Element%20-%20Dec%202022.pdf. Accessed November 7, 2023.

169 U.S. Census Bureau, 2023. 2017-2021 American Community Survey 5-Year Estimates. "Sex of Workers by Place of Work—Place Level, Burlingame City, California." ID B08008. Available at: https://data.census.gov/table/ACSDT5Y2021.B08008?q=B08008:+SEX+OF+WORKERS+BY+PLACE+OF+WORK--PLACE+LEVEL&g=160XX00US0609066. Accessed: November 7, 2023

170 U.S. Census Bureau, 2023. 2017-2021 American Community Survey 5-Year Estimates. "Sex of Workers by Means of Transportation to Work, Burlingame City, California." ID B08006. Available at: https://data.census.gov/table/ACSDT5Y2021.B08006?q=B08006:+SEX+OF+WORKERS+BY+MEANS+OF+TRANSPORTATION+TO+WORK&g=160XX00US0609066. Accessed: November 7, 2023

171 5,448 employees who both live and work in Burlingame – 1,208 employees who work from home = 4,240 Burlingame residents who both live and work in the City. 4,240 Burlingame residents who both live and work in the City / 17,079 employees in Burlingame (excluding those who work from home) = 0.25 percent of Burlingame residents who also work in the City.

substantial number of workers from outside the city or county would not be expected to relocate temporarily or commute long distances. Therefore, impacts associated with inducing substantial population growth during construction would be less than significant.

Operation. Operation of the Project would not result in a direct population increase, but the new employment opportunities could indirectly induce a minor population growth. It is estimated that the office and R&D building would generate a total of 756 net new employees between the office, R&D, and café uses. This level of job growth represents approximately 2.3% of the existing number of jobs in the City. Based on the current rate of employees who work and live in Burlingame at 0.25%, this would result in 2 new households for the City. Using the average number of workers per worker household for the City (1.36), the Project could generate approximately 2 new households.[172] Assuming each employee forms a household with the City average of 2.49 persons, the Project would result in approximately 5 additional residents, representing approximately a small fraction of the anticipated population growth in the City by 2025. The remaining 754 employees generated by the Project are expected to live outside of Burlingame and could also contribute to minor population growth in surrounding cities.

As shown in Table 28, ABAG estimates that the number of households in the City will grow by approximately 435 between 2020 and 2025. The Project would generate demand for 2 housing units in the City. Therefore, the Project-induced housing demand would equate to 0.5%of the projected housing demand by 2025. In 2019, the City entitled the construction of 285 net new units, along with "in progress" applications for approximately 412 new units.[173] New residents induced by the jobs at the Project site could be accommodated within this new construction. With the current housing development projects throughout the City, additional housing would not be needed.

The Project would result in 2 new households throughout the City as a result of the jobs created at the Project site. In total, the Project would generate approximately 5 new residents in the City. The anticipated population growth from the employment growth would represent less than a fraction of the City's projected 2025 population and of the City's population growth between 2020 and 2025. Therefore, the Project would not directly result in substantial population growth beyond what is expected for the City.

The Project is an infill development within an already-developed area of the City. The Project site is well served by urban infrastructure, services, and transit. As described in Section XIX, *Utilities and Service Systems*, the utilities that currently serve the Project site are adequate under existing conditions and would be able to continue serving the site during Project operations. Few lines would be required to connect the Project to the existing utility infrastructure. Furthermore, no infrastructure is proposed as part of the Project that would serve off-site areas. Therefore, the utility connections that would be required for the Project would not contribute to unplanned indirect population growth in off-site areas. The Project would not induce a substantial level of unplanned population growth in the City, either directly or indirectly. The impact would be less than significant.

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172 The 756 net new Project employees/1.36 workers per worker household × 0.25 percent of Burlingame employees who also live in the city = approximately 2 employees who would live in the city.

173 City of Burlingame. 2020. *Staff Report: Housing Element, Annual Progress Report on Implementation of the Housing Element of the General Plan.* March 16. Available: https://www.burlingame.org/document_center/Planning/2019_HE-APR.pdf. Accessed: August 18, 2023.

The Project would not induce substantial unplanned population growth, either directly or indirectly; therefore, the impact would be ***less than significant***.

b. Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Project would demolish the existing onsite office building and parking structure. The building does not include residences; therefore, housing units would not be displaced. Additionally, as the existing buildings are vacant, the Project would not displace any employees. The Project would not displace a substantial number of people and would not necessitate the construction of replacement housing; therefore, there would be ***no impact.***

XV. Public Services

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

Setting

Fire Protection

The Central County Fire Department (CCFD) provides fire protection services within Burlingame, Millbrae, and Hillsborough. In total, the service area covers 15.51 square miles, with a residential population of approximately 66,045.[174] CCFD has 91 full-time employees, and their equipment includes six fire engines, one fire truck, and one rescue truck.[175] There are seven fire stations in the CCFD's jurisdiction, three of which are in Burlingame. The closest CCFD station to the Project is Fire Station No. 36, at 1399 Rollins Road in the city of Burlingame, approximately 0.40 mile southwest of the Project site.[176] The CCFD's goal is to keep response times within 6 minutes, 15 seconds, 90% of the time for emergency medical services (EMS) incidents, and within 6 minutes, 35 seconds, 90% of the time for fire incidents. Overall, the total response time for priority incidents was within 9 minutes, 0 seconds, 90% of the time.[177]

174 Central County Fire Department. 2023. *Adopted Budget Fiscal Year 2023/2024*. Available: https://ccfd.org/wp-content/uploads/2023/04/CCFD-Adopted-Budget-FY-23-34-WEB-VERSION.pdf. Accessed: August 23, 2023.

175 ibid.

176 Central County Fire Department. 2021. *Our Fire Stations*. Available: https://ccfd.org/about-ccfd/fire-stations/. Accessed: August 23, 2023.

177 Central County Fire Department. 2023. *Community Risk Assessment.* Available: https://ccfd.org/wp-content/uploads/2023/07/Central-County-FD-CRA-SOC-Study-FINAL-2023-0327-optimized.pdf. Accessed: August 23, 2023.

Police Protection

The Burlingame Police Department (BPD) provides emergency police services with a 5-square-mile area with approximately 30,000 residents. The BPD has one police station, at 1111 Trousdale Drive, and employs 69 men and women, including 40 sworn officers.[178] The 2040 General Plan does not designate a standard ratio for police officers to residents or a standard emergency response time. As of 2020 the department's emergency response time was 4 minutes, 37 seconds.[179]

Schools

The Burlingame School District (BSD) includes six elementary schools and one intermediate school,[180] with a total enrollment of 3,442 students in the 2021 to 2022 school year.[181] In addition, Burlingame High School, part of the San Mateo Union High School District (SMUHSD), is located in Burlingame.[182] In total, the SMUHSD serves approximately 9,000 students, and enrollment grows every year.[183]

Parks

Please see Section XV, *Recreation*, for a discussion about existing parks and recreational facilities in Burlingame.

Other Public Facilities

The Burlingame Public Library's Easton Branch, at 1800 Easton Drive, is the closest public library to the Project site. The Burlingame Public Library is part of the Peninsula Library System, which serves the eastern portions of San Mateo County, from South San Francisco to Menlo Park.[184] The Burlingame Public Library serves Burlingame and Hillsborough residents as well as any resident within the library system.

Discussion

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to

178 City of Burlingame Police Department. 2022. *About Us.* Available: https://www.burlingame.org/departments/police_department/about_us.php. Accessed: August 23, 2023.

179 Boll, Robert. Captain, Burlingame Police Department. May 21, 2020—voicemail left for Caroline Vurlumis, ICF, San Francisco, CA.

180 Burlingame School District. 2023. *Burlingame School District, About Our District*. Available: https://www.burlingameschools.org/apps/pages/index.jsp?uREC_ID=3585416&type=d&pREC_ID=2404765. Accessed: August 22, 2023.

181 Education Data Partnership. 2022. *Burlingame Elementary*. Available: https://www.ed-data.org/district/San-Mateo/Burlingame-Elementary. Accessed: August 22, 2023.

182 Burlingame High School. 2020. *Burlingame High School, Maps and Directions*. Available: https://www.smuhsd.org/Page/1627. Accessed: August 22, 2023.

183 San Mateo Union High School District. 2020. *Welcome to the San Mateo Union High School District!* Available: https://www.smuhsd.org/domain/46. Accessed: August 22, 2023.

184 Peninsula Library System. 2020. *About PLS*. Available: https://plsinfo.org/about/. Accessed: August 23, 2023.

maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

Fire protection?

The Project would construct an office and R&D building and parking garage on the Project site, which is already developed and currently served by CCFD. Although the Project would not add new residents at the site, there would be an increase in service-population because of the proposed number of employees (756). The Project would be required to comply with all applicable CCFD codes and regulations and meet CCFD standards related to fire hydrants (e.g., fire-flow requirements, hydrant spacing), the design of driveway turnaround areas, and access points, among other standards.

Under CEQA, the need for additional equipment and/or personnel to support fire services is not considered a significant impact unless new facilities need to be constructed, resulting in physical impacts. The increase in the number of employees at the Project site would be minor compared with the population in the rest of the City. Therefore, The Project would not increase the need for fire services, staffing, and/or equipment to the extent that new fire facilities would need to be constructed, resulting in a ***less-than-significant*** impact.

Police protection?

The Project site is currently served by BPD. Although the Project would not add new residents at the Project site, there would be an increase in the service population because of the proposed number of employees (756). Under CEQA, the need for additional equipment and/or personnel to support police services is not considered a significant impact unless new facilities need to be constructed, resulting in physical impacts. The increase in the number of employees at the Project site would be minor compared with the population in the rest of the City. Therefore, The Project would not increase the need for police services or staffing to the extent that new police facilities would need to be constructed, resulting in a ***less-than-significant*** impact.

Schools?

The Project would construct an office and R&D building along with a parking garage; no residential land uses are proposed for the Project site. Therefore, there would be no direct increase in population. However, because of the new employees generated by the Project, the Project could induce population growth and add new students to BSD and SMUHSD. As described in Impact XIV(a), the Project would result in approximately 2 new households in the City. Using the most conservative student generation rate used by the BSD, the Project could result in less than 1 new student, which would not have a significant impact on the school district.[185] In addition, non-residential development, including the Project, is subject to SB 50 school impact fees (established by the Leroy F. Greene School Facilities Act of 1998). Section 65996 of the State Government Code states that the payment of the school impact fees established by Senate Bill 50, which may be required by any state or local agency, is deemed to constitute full and complete mitigation for school impacts from development. Therefore, impacts related to schools would be ***less than significant***.

[185] The student generation rate for the Burlingame School District for transitional kindergarten through sixth grade is 0.2067 student per household.

Parks and other public facilities?

The closest public park to the Project site is Bayside Park, which is approximately 0.50 mile southeast of the site. As explained in more detail in Section XVI, *Recreation*, a significant increase in the use of public parks, recreational facilities, or other public facilities is not anticipated after Project buildout. Furthermore, substantial adverse physical impacts that would require the provision of new or physically altered park facilities after Project buildout would not occur. The Project would not result in a burden on library facilities. Although Project employees and employee-induced Burlingame residents could use these facilities, it is expected that the library system would be able to accommodate the slight increase in the number of library users. Because the Project would not trigger the need for new library or park facilities, the impacts would be ***less than significant***.

XVI. Recreation

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

Setting

The City of Burlingame Parks and Recreation Department manages 19 recreational facilities citywide, including playgrounds, picnic areas, gardens, athletic facilities, walking trails, and more.[186] The closest parks to the Project site are Bayside Park and Village Park. Bayside Park is 0.50 mile southeast of the site and includes lighted fields for soccer, youth baseball, and softball. In addition, the park contains several miles of trails that connect to the Bay Trail system.[187] Village Park is 1.5 miles west of the Project site, across US 101. Village Park is a neighborhood park with a playground, basketball court, fields, and picnic areas. In addition, the Bay Trail, which is accessible from the Project site, across Old Bayshore Highway, provides recreational activities. The Bay Trail, on the perimeter of San Francisco and San Pablo Bays, is a series of existing and planned regional hiking and bicycle trails that will eventually connect. The Bay Trail, which is administered by the Metropolitan Transportation Commission (MTC) and ABAG, is currently more than 350 miles and provides easily accessible recreational opportunities for hikers, joggers, bicyclists, and skaters and offers a setting for wildlife viewing and environmental education.[188] When it is complete, the Bay Trail will connect all nine Bay Area counties, 47 cities, and communities to parks, open spaces, schools, transit, and alternative commute corridors.[189] The segment of the Bay Trail closest to the Project site includes a paved path with benches and trash receptacles.

[186] City of Burlingame. 2022. *Parks and Amenities.* Available: https://www.burlingame.org/parksandrec/facilities/parks_and_playgrounds/index.php. Accessed: August 23, 2023.

[187] ibid.

[188] Metropolitan Transportation Commission. 2023. *About the Bay Trail*. Available: https://mtc.ca.gov/operations/regional-trails-parks/san-francisco-bay-trail/about-bay-trail. Accessed: August 23, 2023.

[189] ibid.

Discussion

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

As described previously, Bayside Park and Village Park are 0.80 and 1.5 miles from the Project site, respectively. Both parks provide recreational opportunities for the nearby community. The Project would construct an office and R&D building and parking garage; no residential land uses are proposed for the Project site. Therefore, there would be no direct increase in population. However, as described in Impact XIV(a), the Project would generate approximately 5 new Burlingame residents, who could use existing neighborhood and regional parks. In addition, employees could use parks during their lunch breaks and before/after work. However, the Project would provide onsite recreational facilities which would reduce the likelihood of employees using or overburdening existing Burlingame park facilities.

The number of proposed employees would not be substantial enough to result in physical deterioration of the parks. In addition, the induced Burlingame population resulting from new employees would not accelerate physical deterioration of the parks. Therefore, the Project would not require development of new park facilities, and the impact would be ***less than significant***.

b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Although the Project would add employees and employee-induced residents to the area, the Project would not trigger the need for construction or expansion of parks or other recreational facilities. Though the Project would not include new or expanded City facilities, new recreational space would be constructed for public use.

The Project includes construction of Prospect Plaza, which will overlook the Shorebird Sanctuary and the Bay. The plaza will be perched over 3 feet above the street and Bay Trail to enact the goals of the Burlingame CAP and amplify views to the Bay. Binocular viewscopes and interpretive panels will help foster enjoyment of the unique urban habitat and wildlife, while stairs and a sloped walk will connect the plaza directly to Old Bayshore Highway's streetscape activity. The south-facing, wind sheltered plaza will provide a respite from persistent shoreline winds and invite year-round recreation.

In addition, the project will construct the Mills Creek Public Trail along its entire Mills Creek frontage to draw the activity of the Bay Trail inland along the Mills Creek corridor and encourage visitors to enjoy this tidal creek. The Project will provide over 400 linear feet of public trail improvements, including two overlooks with interpretive panels, multiple seating areas, and pedestrian lighting. Trail improvements will support daily recreation while passively conveying the ecological importance of urban creeks. This trail will also provide a connection to the Bay Trail that features native-focused plantings and shade trees.

The Project would not trigger the need for construction or expansion of parks or other recreational facilities, and new recreational space would be constructed for public use. Construction of this new public recreational space, as part of the Project, would not have an adverse physical effect on the environment. Therefore, the impact would be ***less than significant***.

XVII. Transportation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?		X		
b.	Conflict or be inconsistent with State CEQA Guidelines section 15064.3, subdivision (b)?			X	
c.	Substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d.	Result in inadequate emergency access?			X	

Setting

A transportation impact analysis (TIA) was prepared by Kittelson & Associates in September 2023 (see Appendix F). The TIA describes existing and future conditions for transportation with and without the Project. In addition, the TIA includes information on the regional and local roadway networks, pedestrian, and transit conditions, and transportation facilities associated with the Project. The TIA also identifies transportation demand management (TDM) measures to be implemented as part of the Project (Appendix F). The Project is expected to generate 265 vehicle trips (213 inbound, 52 outbound) during the weekday AM peak hour and 249 vehicle trips (46 inbound, 203 outbound) during the weekday PM peak hour.

Discussion

a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Construction

Heavy equipment would be transported on and off the site throughout demolition and construction of the Project. The transport of heavy equipment to and from the Project site could cause traffic impacts in the vicinity of the site during construction, which would be a potentially significant impact. In accordance with Mitigation Measure TRA-1, prior to issuance of grading and building permits, the Project applicant would be required to submit a traffic control plan. With implementation of Mitigation Measure TRA-1, demolition and construction activities associated with the Project would not lead to noticeable congestion in the vicinity of the site or the perception of decreased traffic safety. The impact regarding conflicts with applicable plans during construction would be ***less than significant with mitigation.***

Mitigation Measure TRA-1: Traffic Control Plan.

Prior to issuance of grading and building permits, the applicant shall submit a traffic control plan to the City. The traffic control plan shall include the following requirements: Truck drivers shall be notified of and required to use the most direct route between the site and U.S. 101, as determined by the City Engineering Department; all site ingress and egress shall occur only at the main driveways to the Project site; specifically designated travel routes for large vehicles shall be monitored and controlled by flaggers; warning signs, indicating frequent truck entry and exit points, shall be posted on adjacent roadways, if requested; and any debris or mud on nearby streets caused by trucks shall be monitored daily, which may require instituting a street cleaning program.

Operation

The C/Cag of San Mateo County Congestion Management Program requires that projects that are estimated to generate 100 or more new peak hour trips to implement TDM measures. Municipal Code Chapter 25.43 requires implementation of TDM measures when new nonresidential development of 10,000 square feet or more would be constructed. In compliance with the C/CAG of San Mateo County Congestion Management Program and Municipal Code Chapter 25.43, the Project would be required to implement TDM measures to reduce the number of peak-hour trips generated by the Project. Section 2 of the TIA (Appendix F) identifies the TDM measures that would be implemented and indicates that, with TDM measures, the Project would achieve more than the 19.4% reduction required to reduce VMT per employee to below the regional threshold based on the City of County average. Therefore, the Project would be consistent with the CMP and Municipal Code, and the impact associated with conflicts with the CMP and the Municipal Code would be ***less than significant.***

The 2040 General Plan has a goal to improve transit access, frequency, connectivity, and amenities to increase transit ridership and convenience.[190] The Project would be approximately 2 miles west from the Millbrae multimodal transit station, which provides access to BART, Caltrain, and SamTrans buses. The Project site has two bus routes nearby, Route 292 and the Burlingame Bayside Shuttle. The Project would promote continued use of public transit facilities/services. It is assumed that the bus and transit services at the Millbrae multimodal transit station would have adequate capacity and would be able to accommodate the Project's potential minor increase in ridership. The Project would not interfere with any existing bus route and would not remove or relocate any existing bus stops. Therefore, the Project's impact on transit services would be ***less than significant***, and the Project would be consistent with goals identified by the City.

The 2040 General Plan has a goal to develop a network of high-quality, convenient, safe, and easy-to-use bicycle facilities to increase the number of people who use bicycles for everyday transportation.[191] The City Bicycle Transportation Plan has goals to improve existing bicycle routes, promote safe bicycle travel, and establish new connections.[192] Currently, there are bicycle facilities along Old Bayshore Highway in the vicinity of the Project site. Although the Project could add additional bicycle trips, bicyclists would be able to use existing or planned facilities. The Project

190 City of Burlingame. 2019. *Envision Burlingame General Plan.* Mobility Element. Available: BurlingameGP_Final_Nov2019_Chapter 6 (Mobility).pdf (revize.com). Accessed: October 18, 2023.

191 ibid.

192 City of Burlingame. 2004. *Bicycle Transportation Plan.* October 18. Available: Bicycle Transportation Plan.pdf (revize.com) Accessed: October 18, 2023.

would not generate activities that would interfere with access or circulation for people biking. Therefore, the Project's impact on bicycle facilities would be ***less than significant***, and the Project would be consistent with goals identified by the City.

The 2040 General Plan has a goal to ensure that the City's streets are comfortable, safe, and attractive for people of all ages and abilities.[193] Pedestrian facilities in the Project vicinity consist of sidewalks, crosswalks, and signals at signalized intersections. The Project would include sidewalk improvements along the perimeter of the Project site and a publicly accessible open space in the form of an outdoor plaza. Overall, the Project would improve pedestrian facilities at the Project site. Therefore, the Project's impact on pedestrian facilities would be ***less than significant***, and the Project would be consistent with goals identified by the City.

b. Conflict or be inconsistent with State CEQA Guidelines section 15064.3, subdivision (b)?

Because the City has not yet adopted an applicable threshold of significance regarding VMT analysis, the recommended threshold of significance from the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impact in CEQA, November 2017 was used for this analysis. The recommended threshold states: "A proposed project exceeding a level of 15 percent below existing VMT per capita, or per employee, may indicate a significant transportation impact. Existing VMT per capita, or per employee, may be measured as regional VMT per capita or as city VMT per capita." VMT per person (or per capita) is a measurement of the amount and distance that a resident, employee, or visitor drives, accounting for the number of passengers within a vehicle. Many interdependent factors affect the amount and distance a person might drive. In particular, the built environment affects how many places a person can access within a given distance, time, and cost, using different ways of travel (e.g., private vehicle, public transit, bicycling, walking, etc.).

According to the technical advisory by OPR and the City of Burlingame's Traffic Impact Analysis Guidelines (TIA Guidelines), a project may require a detailed VMT analysis unless it meets at least one of five screening criteria. The retail component of the Project would meet the screening criteria for local-serving retail and public services. As the retail component of the Project would be 2,500 square feet and the threshold for locally serving retail is 50,000 square feet or less, the retail component of the Project does not require a detailed VMT analysis. However, the office component of the Project does require a detailed VMT analysis, which is presented below.

The C/CAG Model was used to estimate the average daily VMT per employee for office land uses, which includes R&D. The average daily VMT for office uses in the City is 16.88, and the average daily VMT for office uses in the county is 17.14; for this analysis, the threshold of 15% below the City average of 16.88 would be 14.35 daily VMT per employee. The average daily VMT for office uses in the Project site's Transportation Analysis Zone (TAZ 1948) is 17.8. Therefore, without implementation of TDM measures, the Project's average daily VMT (17.8) would be 19.4% greater than the threshold of 14.35 daily VMT per employee. In other words, the Project's TDM plan would need to achieve at least a 19.4% reduction in VMT per employee in order to have a less-than-significant VMT impact.

As discussed in Section 2.2.3, *Transportation Demand Management*, in Chapter 2, *Project Description*, the Project would implement a TDM plan that would support travel by sustainable modes and

[193] City of Burlingame. 2019. *Envision Burlingame General Plan.* Mobility Element. Available: BurlingameGP_Final_Nov2019_Chapter 6 (Mobility).pdf (revize.com). Accessed: October 18, 2023.

reduce the number of vehicle trips and vehicle miles traveled generated by the Project. Implementation of the proposed TDM measures, which include a commute trip reduction program, ridesharing program, end-of-trip facilities, and employee parking cash out, would reduce VMT per employee related to the Project. Based on an efficacy review, measures in the trip reduction sector would be expected to reduce VMT by 37.5%, while measures in the parking and pricing management and land use sectors would be expected to reduce VMT by 12% and 9.8%, respectively. When considering the combined effect of all measures in the TDM plan, the Project's TDM plan would achieve an estimated VMT reduction of at least 19.4%. Therefore, Implementation of measures identified in the proposed TDM plan would reduce VMT impacts related to the Project to a ***less-than-significant*** level.

c. Substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Section 3 of the TIA (Appendix F) requires a review of the Project design, including a review of the driveway design. As discussed in the TIA, the drive aisle in the garage would be 26-feet wide, which would be adequate for two-way circulation of vehicular traffic and would comply with the minimum width requirements for two-way turning aisles or ramps. Parking stalls within the garage would comply with Municipal Code Chapter 25.40 for accessible, compact, and standard stall types. The proposed driveways into and out of the parking garage would provide adequate sight distance and thereby limit the likelihood of collisions at driveways. The design features of the Project would not include hazardous designs or incompatible uses, and the impact would be ***less than significant.***

d. Result in inadequate emergency access?

The Project would not change the existing roadway system. The Project site would be easily accessible should emergency vehicles be called to the site. Emergency vehicle access would be provided via Old Bayshore Highway and Mahler Road. Adequate emergency access would be provided from the proposed driveways. No internal site circulation or access issues have been identified that would result in a traffic safety problem or unusual traffic congestion or delay. Therefore, the Project would have a ***less-than-significant*** impact on emergency vehicle access.

XVIII. Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		X		
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Setting

PRC Section 21080.3.1 requires that local agencies formally consult with recognized California Native American tribes during the CEQA process to discuss potential impacts on tribal cultural resources. Prior to the release of a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report, the agency must initiate consultation with tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if (1) the tribe requested of the agency, in writing, to be informed through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe; and (2) the tribe responds, in writing, within 30 days of receipt of the formal notification of a proposed project and requests consultation with the agency (PRC Section 21080.3.1(b)).

On June 20, 2023, ICF, on behalf of the City, submitted a request to the Native American Heritage Commission (NAHC) to review its Sacred Lands File (SLF) for the Project site. The NAHC is the official State repository of Native American sacred site location records in California. ICF received a response on July 6, 2023, from the NAHC, stating that, "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative." A list of nine tribal contacts was provided with the NAHC response.

On August 30, 2023, the City sent letters to each of the nine contacts from the list provided by NAHC and to Native American contacts that had previously requested to be contacted by the City for potential consultation informing them of the Project and formally inviting them to consultation

pursuant to PRC Section 21080.3.1(i.e., AB 52). Letters containing details about the Project and a location map were sent to the nine representatives from the following six tribal groups.

- Amah MutsunTribal Band of Mission San Juan Bautista
- Costanoan Rumsen Carmel Tribe
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the SF Bay Area
- The Ohlone Indian Tribe
- Wuksachi Indian Tribe/Eshom Valley Band

The City did not receive any requests for consultation during the 30-day notification period. Therefore, the City has determined that the consultation process is concluded, pursuant to PRC Section 21080.3.1(i.e., AB 52) and PRC Section 21084.3.

Discussion

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

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The results of the NWIC records search and literature review conducted in 2023, as described in Section V, *Cultural Resources*, indicate no previously recorded cultural resources within or adjacent to the Project site. This includes tribal cultural resources listed or eligible for listing in the CRHR or a local register of historical resources. In addition, no tribal cultural resources were identified during the 2023 consultation outreach by the City. However, archaeological deposits that qualify as tribal cultural resources could be encountered during Project excavation. Such resources would be eligible for listing in the CRHR or a local register of historical resources, or the lead agency, in its discretion and supported by substantial evidence, could determine the resources to be significant pursuant to the criteria set forth in subdivision (c) of PRC Section 5024.1. Should deposits be encountered during Project excavation, this could result in an adverse change to a tribal cultural resource. Thus, significant impacts related to tribal cultural resources could result from construction of the Project.

Implementation of Mitigation Measure CULT-1: described in Section V, *Cultural Resources*, would ensure that impacts related to any tribal cultural resources that may be uncovered at the Project site would be ***less than significant with mitigation*** incorporated.

XIX. Utilities and Service Systems

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?		X		
c.	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d.	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Setting

Water

The City purchases all of its potable water from the SFPUC RWS. Approximately 85% of the SFPUC RWS water supply originates from the Tuolumne River through Hetch Hetchy Reservoir. The remaining 15% of the SFPUC RWS water supply originates from local watersheds through the San Antonio, Calaveras, Crystal Springs, Pilarcitos and San Andreas Reservoirs.[194] This water is stored in six different reservoirs in Alameda and San Mateo Counties.[195] Under the Water Supply Agreement between SFPUC and its wholesale customers, Burlingame's individual supply guarantee is 5.23 mgd.

The RWS has historically met demand in its service area in all year types. The water available to SFPUC's retail and wholesale customers from the RWS is constrained by hydrology, physical

[194] City of Burlingame. 2021. *City of Burlingame 2020 Urban Water Management Plan*. Available: https://cms6.revize.com/revize/burlingamecity/document_center/Water/CityofBurlingame_2020_UWMP.pdf . Accessed: August 28, 2023.

[195] ibid.

facilities, and the institutional parameters that allocate the water supply of the Tuolumne River. In addition, statewide regulations and other factors can impact the system reliability. For example, the adoption of the Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) is anticipated to impact the reliability of the RWS supplies in the future. However, there are many uncertainties surrounding the implementation of the current (July 2018) Bay-Delta Plan Amendment, not the least of which is ongoing litigation. Further, SFPUC and other stakeholders are negotiating a Voluntary Agreement that could serve as a substitute to the Bay-Delta Amendment. If the Bay-Delta Plan Amendment is implemented, the proposed unimpaired flow volumes would significantly reduce water supply available through the RWS during future drought condition. The City would be required to reduce their water use by as much as 53.3% during multi-year droughts if no new additional imported or local supplies are developed by the SFPUC or its wholesale customers. In this "worst-case" scenario, the City plans to enact its Water Shortage Contingency Program (WSCP), which includes Mandatory Staged Restrictions of Water Use. The WSCP systematically identifies ways in which the City can reduce water demands during dry years. The overall reduction goals in the WSCP are established for six drought stages and address water demand reductions over 50%. The Bay-Delta Amendment is further described in the Water Supply Assessment (WSA) prepared for the Project (Appendix D).

According to the City of Burlingame 2020 Urban Water Management Plan (UWMP[196]), the City's average water demand between 2018 and 2022 totaled 1,238 million gallons, which is equivalent to 3.39 million gallons per day (mgd), or 65% of the City's allotted 5.23 mgd. Generally, 42% of water consumption is from single-family residential uses, 19% from multi-family residential uses, 12% from industrial uses, 13% from commercial uses, 5.2% from irrigation uses, and 2.8% from institutional uses (the remaining is consumed through losses). In 2022, the City updated its water demand projections to reflect the City's ongoing Housing Element update and assigned Regional Housing Needs Assessment (RHNA) development values. The RHNA anticipated allocation to the City is 3,257 residential units, which is a larger number of units than those projected in the City's 2019 General Plan and those incorporated in the City's 2020 UWMP. The City is currently revising its Housing Element to accommodate its RNHA values. The updated demand values incorporating the City's RHNA, which include both passive and active conservation savings, the water demand within the City is projected to increase to 1,697 million gallons by 2045 (4.65 mgd), an increase of approximately 28% compared to the 2018-2022 average.

As a result of anticipated increases in Citywide water demand, the City has developed a Development Offset Program to show how future demands will be met through the implementation of citywide water conservation programs. The purpose of the Development Offset Program is to ensure that the overall customer demand for water does not exceed available current or future supply under a range of hydrologic conditions, and to ensure the availability of water for residential, commercial, and other purposes for future water use in this service area. New developments that are expected to result in a net demand increase on the City's projected demands are required to pay fees under the Development Offset Program to fund water conservation projects that would offset forecasted demand overages.

196 City of Burlingame. 2021. *City of Burlingame 2020 Urban Water Management Plan*. Available: https://cms6.revize.com/revize/burlingamecity/document_center/Water/CityofBurlingame_2020_UWMP.pdf . Accessed: August 28, 2023.

Wastewater

The City's Public Works Department services the City's wastewater system. Wastewater flows are carried to a wastewater treatment plant (WWTP) at 1103 Airport Boulevard, which serves the entire city of Burlingame as well as approximately one-third of Hillsborough. The average dry-weather flow of wastewater to the WWTP has remained fairly constant, at approximately 3.0 to 3.5 mgd, which is approximately 55 to 64% of the facility's 5.5 mgd capacity.[197]

Stormwater

Under existing conditions, stormwater from the Project site is conveyed by a system of storm drains that feed into the creeks that run from the face of the Coastal Ranges to San Francisco Bay. Sites that have Bay frontage drain directly into the Bay. Because the City's stormwater system empties into the San Francisco Bay, it is subject to the requirements of the Clean Water Act of 1972, which prohibits the discharge of stormwater into waters of the United States, unless the discharge is in compliance with a NPDES permit, as described in detail in Section X, *Hydrology and Water Quality*.

Solid Waste

The city is within the service area of RethinkWaste, also known as the South Bayside Waste Management Authority. The City of Burlingame, as well as the Cities of Atherton, Belmont, East Palo Alto, Foster City, Hillsborough, Menlo Park, Redwood City, San Carlos, and San Mateo; the County of San Mateo; and the West Bay Sanitary District form the Joint Powers Authority (JPA) for Rethink Waste.[198] Recology San Mateo County provides recycling, composting, and garbage collection services for residents and businesses in the RethinkWaste service area. Recyclables and organic solid waste are taken by Recology trucks to the Shoreway Environmental Center in San Carlos for sorting. The Shoreway Environmental Center is owned by RethinkWaste and operated by South Bay Recycling on behalf of RethinkWaste. Solid waste and recyclables received at the Shoreway Environmental Center are processed and sent to the appropriate facility, including the Ox Mountain Landfill (also known as Corinda Los Trancos Landfill), which is in Half Moon Bay. This landfill is expected to remain operational until 2034 and has a permitted throughput capacity of 3,598 tons per day.[199]

Electric Power, Natural Gas, and Telecommunications Facilities

PG&E's natural gas (methane) delivery system includes approximately 42,000 miles of distribution pipelines and 6,700 miles of transmission pipelines. Gas delivered by PG&E originates in gas fields in California, the Southwest, the Rocky Mountains, and Canada. Transportation pipelines send natural gas from fields and storage facilities in large pipes while under high pressure. The smaller distribution pipelines deliver gas to individual businesses or residences. PG&E gas transmission pipeline systems serve approximately 15 million customers in

197 City of Burlingame. 2021. *City of Burlingame 2020 Urban Water Management Plan*. Available: https://cms6.revize.com/revize/burlingamecity/document_center/Water/CityofBurlingame_2020_UWMP.pdf . Accessed: August 28, 2023. (see page 62 of 398).

198 Rethink Waste South Bayside Waste Management Authority. 2023. *About.* Available: https://rethinkwaste.org/about/rethinkwaste/about/. Accessed: August 28, 2023.

199 CalRecycle. 2019*. SWIS Facility/Site Summary Details: Corinda Los Trancos Landfill (Ox Mtn) (41-AA-0002).* Available: https://www2.calrecycle.ca.gov/SolidWaste/Site/Details/3223. Accessed: August 28, 2023.

California. The system is operated under an inspection-and-monitoring program in real time on a 24-hour basis. The program provides leak inspections, surveys, and patrols of the pipelines.[200]

Numerous telecommunications providers serve Burlingame and provide access to infrastructure for broadband, fiber optic, wireless, and other emerging technologies. AT&T, Xfinity from Comcast, Wave Broadband, Sonic, and others provide telecommunication and cable television services to residents and businesses in the city. The Project site receives services from Xfinity, AT&T, and Comcast.[201]

Discussion

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water and Wastewater Facilities

As described in more detail in impacts XIX(b) and (c), the increased water and wastewater treatment demand, which would be minimal, could be served by the existing water supply and remaining capacity of the WWTP. The Project would not require relocation or construction of new or expanded water or wastewater treatment facilities because there is adequate water and wastewater treatment capacity available to serve the Project. Therefore, the impact would be ***less than significant***.

Stormwater

As described in Section X, *Hydrology and Water Quality*, Impact X(c), overall, the amount of stormwater that would be discharged with implementation of the Project would be lower than what is currently discharged. The Project site would treat stormwater on site, in accordance with LID treatment measures and mechanical treatment, per the NPDES program. Treated stormwater would drain through three existing 18-inch storm drain outfalls along Mahler Road and Old Bayshore Highway, and into Mills Creek. No new stormwater drainage facilities would be required. Therefore, impacts associated with new stormwater drainage facilities would be ***less than significant***.

Electric Power, Natural Gas, and Telecommunications Facilities

Operation of the Project is not anticipated to result in the construction or expansion of electric power, natural gas, or telecommunications facilities. The proposed building would be all electric, so natural gas would not be required to operate the building. Existing electric and telecommunications lines in the vicinity of the Project site would serve the Project. However, they may be upgraded, if necessary, to meet the needs of the Project.

The installation of new or expanded telecommunications lines on the Project site would require excavation, trenching, soil movement, and other activities that are typical during the construction of development projects. These construction impacts are discussed in detail in the appropriate

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200 Pacific Gas & Electric. *Learn about the PG&E Natural Gas System*. Available: https://www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/natural-gas-system-overview.page. Accessed: September 5, 2023.

201 BroadbandNow. n.d. *Internet Service Providers in Burlingame, California.* Available: https://broadbandnow.com/California/Burlingame#. Accessed: September 5, 2023.

resource sections of this document as part of the assessment of overall Project impacts. However, no offsite natural gas facilities or telecommunication lines would need to be constructed or expanded as a result of the Project, resulting in a ***less-than-significant*** impact.

The Project would connect to existing electric lines located around the perimeter of the Project site. No new electric power or natural gas lines would need to be installed. The Project site is served by both AT&T and Comcast for internet and other telecommunication services.[202] No new telecommunication lines would need to be installed. For the reasons outlined above, no off-site natural gas facilities would need to be constructed or expanded as a result of the Project and telecommunication lines would not need to be installed, resulting in ***less-than-significant*** impacts.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The Project's total net water demand is projected to be 17 million gallons per year (MGY) upon full occupancy.[203] As discussed above, in accordance with the City's Development Offset Program , the Project is required to pay a Development Offset Fee that would be used to fund expanded customer conservation programs as well as accelerated water supply and water efficiency projects to offset a portion of the Project's water demand. Therefore, the Project is not expected to result in a net increase in the City's water demands beyond those projected in the City's 2020 UWMP water demand projections and the City's 2022 water demand projections update.

In evaluating the Project's water demand to available supplies, the WSA evaluated three scenarios: 1) With Implementation of the Bay-Delta Plan Amendment, 2) Without Implementation of the Bay-Delta Plan Amendment, and 3) With Implementation of the Voluntary Agreement. Under Scenario 1, shortfalls of up to 53.3% are possible in drought periods, representing the "worst-case" supply scenario. Under Scenario 2, in which the Bay-Delta Plan Amendment is not implemented, the City will have sufficient supply to meet the demands in all year types through 2040 and would only anticipate a supply shortfall of 14.3% during the 4th and 5th year of a multi-year drought by 2045. Under Scenario 3, it is anticipated that the degree of water use reduction during dry years would also more closely align with the SFPUC's RWS goal of limiting water use reduction to no more than 20% on a system-wide basis in drought years. However, because negotiations are not complete, no values are available to explicitly model Scenario 3.

The City anticipates that, as a "worst-case" scenario under Scenario 1, the Project could be subject up to 53.3% rationing during a severe drought. In accordance with the WSCP, the level of rationing that would be imposed on the Proposed Project and all City customers would be determined at the time of a drought or other water shortage condition and cannot be established with certainty prior to the shortage event.

Overall, through implementation of the City's Development Offset Program (Mitigation Measure UTIL-1), the Project would not affect water supply reliability within the City beyond what has been projected, assuming actual water demands are within the projected water demands in the Project's WSA. Based on currently available information, the City expects to be able to meet all future demands within its service area inclusive of the Project in normal hydrologic years and dry years.

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202 California Public Utilities Commission. 2020. *Interactive Broadband Map.* Available: https://www.broadbandmap.ca.gov/Accessed: September 5, 2023.

203 City of Burlingame. 2023. *Water Supply Assessment for 1499 Old Bayshore Highway*. Prepared by EKI Environmental & Water, Inc. July.

The shortfalls that are currently projected during dry years will be addressed through planned implementation of the City's WSCP. In addition, as described herein and in the City's 2020 UWMP, the City, the Bay Area Water Supply and Conservation Agency (BAWSCA), and SFPUC are pursuing the development of additional water supplies and mitigation measures to improve the RWS and local supply reliability. Therefore, with implementation of Mitigation Measure UTIL-1, adequate water supplies would be available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years; the impact would be ***less than significant with mitigation***.

Mitigation Measure UTIL-1: Contribute to Water Conservation Programs under the City's Development Offset Program.

Per the Development Offset Program, the Project sponsor shall contribute to funding of water conservation programs to offset the Project's contribution to the City's water demand overage.

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

As described previously, the WWTP treats approximately 3.0 to 3.5 mgd of wastewater, which represents approximately 55% to 64% of the facility's 5.5 mgd capacity. Therefore, 36% to 45%of the WWTP's capacity remains available to treat wastewater. As discussed in the section above, the Project's water demand is anticipated to total 100,368 gpd (0.10 mgd); therefore, it is conservatively estimated that the Project would generate 0.09 mgd of wastewater.[204] This additional wastewater demand due to the Project represents approximately 4.5% of the remaining wastewater treatment capacity (2.0 mgd) at the WWTP.[205] Currently, the remaining wastewater treatment capacity can accommodate the minimal increase in wastewater demand that would result from the Project. Therefore, the Project's impact would be ***less than significant***.

d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The California Integrated Waste Management Act of 1989 (AB 939) requires municipalities to adopt an integrated waste management plan to establish objectives, policies, and programs related to waste disposal, management, source reduction, and recycling. In addition, SB 1383, passed in 2016, established a target that calls for a 50% reduction in organic waste by 2020 and a 75% reduction by 2025. The City is part of a regional JPA that manages solid waste collection and recycling services for several cities. The JPA is required to divert waste from landfills to achieve state reduction goals. In 2022, San Mateo County as a whole had a total diversion rate of 50.66% because of recycling and composting. The City had a slightly lower diversion rate than San Mateo County, with 50.11% of waste diverted from landfills.[206]

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204 This metric was calculated using a 90% rate for water returning to the sewer system as wastewater for non-residential users and 95% for multi-family residential users. Residents = (4,356 gpd × 0.95) = 4,138 gpd of wastewater. Employees = (96,012 × 0.90) = 86,410 gpd of wastewater. Total wastewater = 4,138 gpd from residents + 86,410 gpd from employees = 90,548 gpd of wastewater.

205 4.5% = (0.09 mgd Project wastewater/2.0 mgd remaining capacity) × 100%.

206 Recology San Mateo County. 2023. *Annual Report to the SBWMA for Year 2022*. Available: https://rethinkwaste.org/wp-content/uploads/2023/04/RSMC-Annual-Report-2022.pdf. Accessed: September 5, 2023.

Construction of the Project would generate waste; however, the Project would be required to adhere to state and local standards. The Project would generate approximately 900 tons of building debris, approximately 60% of which would need to be recycled. Therefore, construction of the Project would require building materials to be disposal of at a permitted landfill. In addition, operation of the Project would most likely increase overall solid waste generation because of the additional office workers on the site, along with retail workers, compared with the currently vacant site. However, operation of the proposed facility would be required to meet state and local standards regarding solid waste and recycling. The increase in the amount of solid waste generated would be considered negligible because the landfills that would be used would continue to have adequate capacity and would be able to handle the minimal increase.

In 2021, residential uses in the City generated approximately 4.6 pounds of solid waste per person per day (ppd) and 5.8 pounds per employee.[207] Therefore, using a conservative estimate of the number of new residents in the City (5) and considering the new employees on the Project site (756), the Project could generate approximately 4,408 pounds of solid waste per day (2.3 tons per day) in the form of garbage as well as recycling and composting material.[208] The Shoreway Environmental Center is permitted to receive 3,000 tons of refuse per day.[209] Once collected and sorted at Shoreway, solid waste is transported to Corinda Los Trancos Landfill, which is permitted to receive 3,598 tons per day.[210] Solid waste generated by operation of the Project would represent approximately 0.06% of the daily permitted capacity of the Shoreway and Corinda Los Trancos Landfills. As such, the Shoreway and Corinda Los Trancos Landfills would have adequate capacity and would be able to serve the Project.

The Project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair attainment of solid waste reduction goals. Therefore, the impact from solid waste disposal would be ***less than significant***.

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Project would develop an office and R&D building, which would not result in the generation of unique types of solid waste that would conflict with existing regulations regarding waste disposal. The Project would be required to comply with the City's solid waste disposal requirements, including recycling programs established under AB 939. As a result, the Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, and the impact would be ***less than significant***.

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207 CalRecycle. 2021. *Jurisdiction Per Capita Disposal Rate Trends (2021)*. Jurisdiction: Burlingame. Available: https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports. Accessed: September 5, 2023.

208 (5 residents × 4.6 pounds) + (756 employees × 5.8 pounds) = approximately 4,407.8 pounds per day.

209 RethinkWaste. 2023. *About Shoreway.* Available: https://rethinkwaste.org/shoreway-environmental-center/about/. Accessed: September 5, 2023.

210 CalRecycle. 2019*. SWIS Facility/Site Summary Details: Corinda Los Trancos Landfill (Ox Mtn) (41-AA-0002).* Available: https://www2.calrecycle.ca.gov/SolidWaste/Site/Details/3223. Accessed: August 28, 2023.

XX. Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?				X
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Setting and Discussion

The Project site is not located in a Moderate, High, or Very High Fire Hazard Severity Zone (FHSZ) within a State Responsibility Area. The closest State Responsibility Area to the Project site is a Moderate FHSZ approximately 2.25 miles from the site, west of I-280.[211] The Project site and all surrounding areas are within a Local Responsibility Area, which is not identified as a Moderate, High, or Very High FHSZ. The area is generally developed and lacking the features that normally elevate wildland fire risks (dry vegetation, steeply sloped hillsides, etc.). Because the Project site is not within or near a State Responsibility Area or a Very High FHSZ, there would be ***no impact*** related to wildfire, and further analysis is not required.

[211] California Department of Forestry and Fire Protection. 2007. *Fire and Resource Assessment Program Fire Hazard Severity Zones in SRA*. San Mateo County. Available: https://osfm.fire.ca.gov/media/6802/fhszs_map41.pdf. Accessed: August 2, 2023.

XXI. Mandatory Findings of Significance

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			X	
b.	Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		X		
c.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Discussion

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

As described in Section IV, *Biological Resources*, the Project site is in an urban area and surrounded by development. Other than the trees that occur on the site, there are no natural environment or habitat features on the Project site. The removal of trees would not degrade the quality of the environment because the trees are not naturally occurring; they were planted for landscaping purposes. Although nesting birds could use the trees and the building that would be removed from the Project site, there are trees elsewhere in the City as well as suitable natural habitat outside the City. Therefore, the Project would not reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. As described in Section V, *Cultural Resources*, construction of the Project would not eliminate important examples of major periods of California history or prehistory. The Project's impact would be ***less than significant***.

b. Does the Project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

This cumulative impact analysis determines whether the Project in combination with other approved or foreseeable projects would result in a significant cumulative impact and, if so, whether the Project's contribution to the significant cumulative impact would be cumulatively considerable.

This initial study evaluates cumulative impacts using the General Plan EIR because the Project is consistent with applicable land use plans and policies. The General Plan EIR is incorporated by reference and available for public review online.[212] The General Plan EIR evaluated future development, as identified in the 2040 General Plan.[213] Chapter 22 of the General Plan EIR concluded that implementation of the 2040 General Plan would result in a less-than-significant impact with respect to cumulative impacts on the following resources: aesthetics; agricultural resources; air quality; biological resources; geology, soils, and minerals; hazards and hazardous materials; historic and cultural resources; hydrology and water quality; land use and planning; noise; population and housing; public services; and utilities. Given the conclusions in the General Plan EIR; given that the Project, with mitigation, would have a less-than-significant impact on the aforementioned resources; and given that future projects would be required to adhere to federal and state regulations, as well as local regulations identified in the 2040 General Plan, the Project's contribution to impacts on the aforementioned resources would not be singularly or cumulatively considerable.

Chapter 10 of the General Plan EIR includes the cumulative impact analysis of greenhouse gas emissions. The General Plan EIR concluded that implementation of the 2040 General Plan could result in a significant cumulative greenhouse gas impact because the City cannot conclusively demonstrate that implementation of the 2040 General Plan would not generate greenhouse gas emissions that would exceed the City's existing and future greenhouse gas reduction goals. The Project's contribution to global climate change due to greenhouse gas emissions is discussed in Section VIII, *Greenhouse Gas Emissions*. Development of the Project would incorporate applicable policies of the Bay Area Air Quality Management District and comply with the City's Climate Action Plan. As discussed in Section VIII, *Greenhouse Gas Emissions*, the Project would be consistent with the state's greenhouse gas emissions reduction trajectory. Therefore, the Project's contribution to this cumulative impact would not be cumulatively considerable.

Chapter 18 of the General Plan EIR includes the cumulative transportation impact analysis. The General Plan EIR concluded that implementation of local regulations and 2040 General Plan policies would ensure that cumulative transportation impacts would be less than significant.[214] As discussed in Section XVII, *Transportation,* the Project would result in a less-than-significant impact with respect to VMT, design hazards, emergency access, and that construction of the Project would result in a less-than-significant impact on applicable plans after implementation of mitigation. Given that the Project can mitigate impacts to less-than-significant levels, and given that future projects would

212 City of Burlingame. 2018. *Burlingame 2040 General Plan Draft EIR*. Available: BurlingameGP_DEIR_FullDocument_06-28-2018.pdf (revize.com) Accessed: November 2, 2023.

213 City of Burlingame. 2019. General Plan Update. *Envision Burlingame General Plan*. Available: https://www.burlingame.org/departments/planning/general_plan_update.php. Accessed: August, 10 2023.

214 The General Plan EIR included a conclusion for level-of-service (LOS) impacts. The LOS conclusion is not considered here because CEQA does not consider impacts on LOS to be an environmental effect.

be required to adhere to local regulations and 2040 General Plan policies, the Project's contribution to cumulative transportation impacts would not be singularly or cumulatively considerable. Therefore, cumulative impacts would be ***less than significant after mitigation.***

c. Does the Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

As described in this document, implementation of the Project could result in temporary air quality, biological resources (nesting birds) cultural resources, geology and soils (paleontological resources), hazardous materials, noise, and transportation impacts during the construction period. The Project could also result in impacts to wildlife due to increased lighting during operation and water supply. However, implementation of the mitigation measures recommended in this document would ensure that the Project would not result in environmental effects that would have substantial adverse effects on human beings. Impacts would be ***less than significant after mitigation***.