State of California - Department of Fish and Wildlife

2024 ENVIRONMENTAL DOCUMENT FILING FEE CASH RECEIPT

DFW 753.5a (REV. 01/01/24) Previously DFG 753.5a

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RECEIPT NUMBER:
41-12232024-0001

STATE CLEARINGHOUSE NUMBER *(If applicable)*

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY	LEAD AGENCY EMAIL	DATE
CITY OF SAN MATEO		12/23/2024
COUNTY/STATE AGENCY OF FILING		DOCUMENT NUMBER
SAN MATEO COUNTY		129094

PROJECT TITLE

MARINA BRANCH LIBARY RESTORATION PROJECT

PROJECT APPLICANT NAME	PROJECT APPLICANT EMAIL	PHONE NUMBER
CITY OF SAN MATEO		
PROJECT APPLICANT ADDRESS	CITY STATE	ZIP CODE

PROJECT APPLICANT *(Check appropriate box)*

☒ Local Public Agency ☐ School District ☐ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

☐ Environmental Impact Report (EIR)	$ 4,051.25	$
☐ Mitigated/Negative Declaration (MND)(ND)	$ 2,916.75	$
☐ Certified Regulatory Program (CRP) document - payment due directly to CDFW	$ 1,377.25	$

☒ Exempt from fee

- ☒ Notice of Exemption (attach)
- ☐ CDFW No Effect Determination (attach)

☐ Fee previously paid (attach previously issued cash receipt copy)

☐ Water Right Application or Petition Fee (State Water Resources Control Board only)	$ 850.00	$
☒ County documentary handling fee	$ 50.00	$ 50.00
☐ Other		$

PAYMENT METHOD:

☐ Cash ☒ Credit ☐ Check ☐ Other **TOTAL RECEIVED** $ 50.00

SIGNATURE	AGENCY OF FILING PRINTED NAME AND TITLE
X [signature]	Niles Lopshire Deputy Clerk

ORIGINAL - PROJECT APPLICANT COPY - CDFW/ASB COPY - LEAD AGENCY COPY - COUNTY CLERK DFW 753.5a (Rev. 01012024)

NOTICE OF EXEMPTION

To: San Mateo County Clerk-Recorder
555 County Center
Redwood City, CA 94063

From: City of San Mateo
330 West 20th Avenue
San Mateo, CA 94403

Project Title: Marina Branch Library Restoration Project

Project Location: 1530 Susan Court

Project Location – City: San Mateo **Project Location – County:** San Mateo

Name of Public Agency Approving Project: City of San Mateo

Description of Project: The project proposes to resolve settlement issues at the library with deep helical piles to underpin the existing foundation. The project would install approximately 158 piles, ranging in size from 2.875-inches to 3.5-inches, to a depth of approximately 60 feet. To install the piles, the existing building's interior floor would be removed to allow access to the foundation. Piles would be screwed into the ground with a bobcat or walk-behind and no pile driving would be required. The project would also include American with Disabilities Act (ADA) accessibility improvements throughout the site and interior spaces. Site drainage improvements such as adding gutters to the building and replacement of landscaping around the library perimeter would also be implemented by the project. In addition, the project would remove the rear deck to allow access for pile installation and relocate it to the south side of the library. Other minor exterior/interior improvements (e.g., roof replacement, lighting, external/indoor painting, flooring, HVAC equipment, electrical fixtures, restrooms, etc.) would also be completed. The project would remove a total of five trees from the project site.

Name of Person or Agency Carrying Out Project: City of San Mateo

Exempt Status: Categorical Exemption, Class 1, Existing Facilities Section 15301; Class 2, Replacement and Reconstruction Section 15302

Reasons why project is exempt:

The project would renovate the existing Marina Branch Library building's foundation, exterior, and interior. The project would not expand the existing library or change the functions or events that occur at it. Therefore, the proposed project would repair an existing facility and be a replacement or reconstruction in the same location and will have substantially the same purpose and capacity as the structure replaced. Per section 15300.2 of the California Environmental Quality Act (CEQA) Guidelines, it has been determined that the Marina Branch Library Restoration is not included on any list compiled pursuant to Section 65962.5 of the Government Code (i.e., Cortese List), the project would not result in a significant impact due to unusual circumstances, damage scenic resources, affect a historic resource, or result in a cumulative impact. For these reasons and those stated above, the project is exempt from the provisions of CEQA.

Lead Agency Contact Person: Karen Cornejo **Phone Number:** (650) 522-7576

Signature: Karen Cornejo **Date:** 12-19-24 **Title:** Assistant Engineer

Signed by Lead Agency

MEMORANDUM

December 16, 2024

From: Will Burns, Principal
David J. Powers & Associates, Inc.
1736 Franklin Street, Suite 400
Oakland, CA 94612

To: Jimmy Vo, Engineering Manager
City of San Mateo
330 W. 20th Avenue
San Mateo, CA 94403

Re: Qualification of the Marina Branch Library Restoration for CEQA Categorical Exemption

INTRODUCTION TO CATEGORICAL EXEMPTIONS

The California Environmental Quality Act (CEQA) Guidelines contain classes (or categories) of projects that have been determined not to have a significant effect on the environment and are therefore exempt from the provisions of CEQA. CEQA Guidelines Sections 15301 – 15333 constitute the list of categorically exempt projects and contain specific criteria that must be met in order for a project to be found exempt. Additionally, CEQA Guidelines Section 15300.2 includes a list of exceptions to exemptions, none of which may apply to a project in order for it to qualify for a categorical exemption, i.e., if an exception applies, a project is precluded from being found categorically exempt.

CEQA Guidelines Section 15301 (Class 1) – Existing Facilities sets forth criteria for projects characterized as existing facilities that may be found categorically exempt. The analysis below shows that: a) none of the exceptions contained in 15300.2 apply to the project, and b) the project is consistent with the existing facilities criteria in Section 15301. We conclude that the project proposed for the Marina Branch Library Restoration can be found categorically exempt from CEQA under Guidelines Section 15301. Additionally, the analysis that follows shows the project may also be found exempt under Section 15302 (Class 2) – Replacement or Reconstruction.

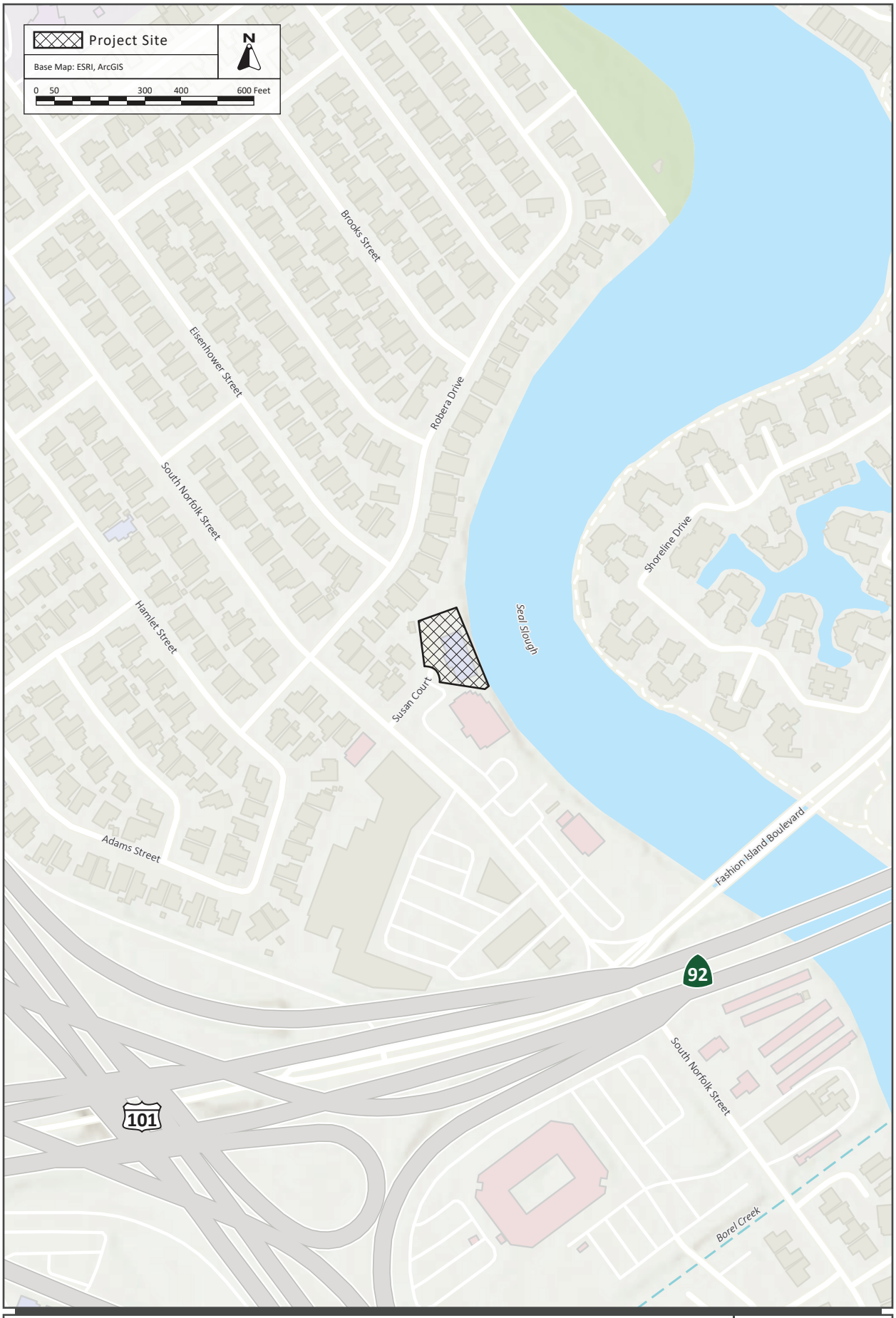
PROJECT DESCRIPTION

Existing Setting and Surrounding Land Uses

The approximately 0.6-acre project site is located at 1530 Susan Court in the City of San Mateo. A regional map, vicinity map, and aerial photograph are shown in Figures 1 through 3, respectively. The existing library consists of one building with a rear deck, a surface parking lot, walking paths, open lawn areas, and a total of eight existing trees. The Marina Branch Library has experienced severe differential settlement. Currently, the floor sloping in the interior has created an unsafe environment for both patrons and library staff. The preliminary geotechnical and structural findings indicate that underpinning of existing foundations on the interior and perimeter will be required to stabilize the structure and re-level the floors.

Surrounding land uses include single-family residences to the north and west, commercial uses to the south, and Seal Slough to the east.

REGIONAL MAP | FIGURE 1



VICINITY MAP | FIGURE 2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 3

Proposed Project

The project proposes to resolve settlement issues at the library with deep helical piles to underpin the existing foundation. The project would install approximately 158 piles, ranging in size from 2.875-inches to 3.5-inches, to a depth of approximately 60 feet. To install the piles, the existing building's interior floor would be removed to allow access to the foundation. Piles would be screwed into the ground with a bobcat or walk-behind and no pile driving would be required.

The project would also include American with Disabilities Act (ADA) accessibility improvements throughout the site and interior spaces. Site drainage improvements such as adding gutters to the building and replacement of landscaping around the library perimeter would also be implemented by the project. In addition, the project would remove the rear deck to allow access for pile installation and relocate it to the south side of the library. Other minor exterior/interior improvements (e.g., roof replacement, lighting, external/indoor painting, flooring, HVAC equipment, electrical fixtures, restrooms, etc.) would also be completed. The project would remove a total of five trees from the project site. A site plan of the proposed restorations and drainage improvements are shown in Figure 4.

Source: BKF Engineers, December 6, 2023.

CONCEPTUAL SITE PLAN

FIGURE 4

I. EXCEPTIONS TO CATEGORICAL EXEMPTIONS

This section documents that none of the exceptions in CEQA Guidelines Section 15300.2 would disqualify the project from being found categorically exempt.

CEQA Guidelines Section 15300.2 – Exceptions

(a) Location: Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located – a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.

This exception only applies to Class 3, 4, 5, 6, and 11 exemptions. The proposed project is categorically exempt under Class 1 and 2, therefore the exception under CEQA Guidelines Section 15300.2(a) is inapplicable.

(b) Cumulative Impact: All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

The proposed improvements would restore the existing library building and would not result in an expansion of use. While most of the project's impacts would be limited to the project site, emissions of GHGs and regional criteria pollutants would have potential to have a broader impact. The cumulative impacts of these emissions are discussed below.

The City is also conducting CEQA review for a project at 1855 South Norfolk Street, directly south of the project site, that would construct 260 multi-family units and 1,200 square feet of commercial space. Construction of this project could potentially result in overlapping construction timeframes with the proposed library restoration; however, the 1855 South Norfolk Street project would be required to mitigate any impacts to GHG emissions and regional criteria air pollutants to a less than significant level and, therefore, the library project would not result in cumulative impacts in combination with the adjacent redevelopment project. In addition, as explained below, the proposed library restoration would not result in any significant GHG or regional criteria air pollutant emissions; thus, the project would not contribute to a significant cumulative impact.

Greenhouse Gas Emissions

Global climate change is by its very nature a cumulative impact. In April 2022, the Bay Area Air Quality Management District (BAAQMD) adopted new thresholds for assessing the impacts that projects and plans would have on climate change. BAAQMD provided a justification report that described these new qualitative thresholds that are recommended for lead agencies to consider when approving projects or plans through the CEQA process. BAAQMD has determined that projects meeting the following requirements would contribute their fair share to the goal of carbon neutrality by 2045:

- The project will not include natural gas plumbing or appliances,
- The project will not result in wasteful, inefficient, or unnecessary energy usage,

- Complies with SB 743 vehicle miles traveled (VMT) targets, and
- Complies with off-street electric vehicle (EV) requirements in CALGreen Tier 2.

The proposed library restoration will not change the land use or expand the size of the library; thus, natural gas usage is expected to decrease with the installation of more efficient all electric HVAC equipment. Energy would be consumed during project construction and operation. The overall construction schedule and process is designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel would not be used wastefully on the site because of the added expense associated with renting, maintaining, and fueling equipment. Energy is consumed during construction because the use of fuels and building materials are fundamental to construction of new buildings; however, energy would not be wasted or used inefficiently by project construction equipment. Project operation would consume energy in the form of electricity for interior and exterior lighting, HVAC equipment, and day-to-day operations running the library. The library is currently open and operating; thus, these elements of the project would not represent a substantial increase in energy usage. In addition, the proposed renovations would replace outdated electrical fixtures and HVAC equipment with more energy efficient versions, resulting in less energy usage. Thus, the proposed project would not use energy inefficiently or wastefully.

The project does not propose any additional vehicle parking at the site and thus, is not required to provide electric vehicle charging spaces. According to the City's Transportation Impact Analysis Guidelines, City facilities such as libraries are exempt from VMT analysis and presumed to have a less than significant transportation impact. Therefore, the project would comply with the SB 743 VMT reduction targets. For these reasons, the project would have a less than significant contribution toward a cumulative GHG emissions impact.

Regional Criteria Pollutants

In its CEQA Air Quality Guidelines, BAAQMD developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a proposed project could result in potentially significant air quality impacts. If the size of the project is below the BAAQMD screening criteria, then the lead agency does not need to perform a detailed air quality assessment to compare the project's emissions to the BAAQMD significance thresholds. Project construction and operations would generate regional criteria pollutants that would contribute to cumulative regional air quality impacts. BAAQMD has adopted thresholds for screening levels for land uses to indicate whether a project would contribute a significant cumulative regional air quality impact. The project, which proposes to restore the existing library and make site improvements to the approximately 0.6-acre (27,000 square feet) site, would not exceed the construction criteria pollutant screening threshold of 452,000 square feet or the operational criteria pollutant screening threshold of 123,000 square feet for a library. These thresholds are related to construction and operation of new libraries, while the existing library operations are the baseline condition, the proposed project would not expand and would incrementally increase the library usage, as discussed in more detail below in Section II Existing Facilities Criteria. Vehicles visiting and leaving the project site would be the main source of operational air pollution. As previously discussed, per the City's Transportation Impact Analysis Guidelines, public facilities are assumed to result in a less than significant VMT impact. The project, therefore, would not make a substantial contribution toward a significant cumulative impact of regional criteria pollutants.

(c) Significant Effect: A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

The proposed renovations and site improvements would not include any features that are unique or that would constitute "unusual" circumstances for a library in the San Francisco Bay Area. Parking lots, and landscaping are common features of libraries. Installation of piles for foundations is typical in areas near the San Fracisco Bay coastline and underlain by artificial fill and/or bay mud. The surrounding land uses (residential and commercial) are commonly located near libraries, and do not make for an unusual location or setting for such community features. The existing library grounds do not contain any unusual or unique environmental resources. Conditions related to Seal Slough and the slough's ability to support special-status plants and wildlife are discussed in detail below. Conditions related to the installation of the helical piles and construction noise are also discussed in detail below.

Biological Resources

H.T. Harvey & Associates, Inc. (H.T. Harvey) prepared a Biological Resources Report (see Appendix A) for the project, to document the existing biological setting of the project site.

Special-Status Species

H.T. Harvey determined that no special-status (i.e., rare, endangered, or threatened) plants have a reasonable potential to occur on or adjacent to the project site for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range on the study area; and/or (4) the species is presumed extirpated. In addition, the project site is a developed site and is situated on Bay fill that would have historically been either open waters or tidal marsh but that, in most areas, does not provide suitable habitat for special-status plants. The muted tidal open water in the eastern portion of the study area is not expected to provide suitable habitat for special-status plant species that are typically found in salt marsh due to the disturbed nature of this feature and the likelihood that it was formed after the fill placement that formed the current shoreline.

Special-status wildlife species expected to occur on-site are limited to nonbreeding migrants, dispersants, or foragers (i.e., they do not nest on the project site). These species include Crotch's bumble bee (*Bombus crotchii*), California least tern, Vaux's swift (*Chaetura vauxi*), olive-sided flycatcher (*Contopus cooperi*), San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), yellow warbler (*Setophaga petechia*), Alameda song sparrow (*Melospiza melodia pusillula*), Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*), and western red bat (*Lasiurus blossevillii*). The monarch butterfly is not known to breed or overwinter on or adjacent to the project site; however, it could occasionally forage in the area or roost in the trees on-site during their fall and spring migrations. The western red bat is also not known to breed on or adjacent to the project site but could be present at the site as a migrant. Aquatic wildlife, such as the California sea lion, Pacific harbor seal, Central California Coast steelhead, green sturgeon, longfin smelt, Pacific lamprey (*Entosphenus tridentatus*), Central Valley fall-run Chinook salmon (*Oncorhynchus tshawytscha*), Pacific herring, and Olympia oyster, are present in San Francisco Bay. Seal Slough, however, is controlled by a tide gate and pump station, which excludes these species from being present within Seal Slough. Thus, these species would not occur on or adjacent to the project site. None of the wildlife species

identified above are expected to occur regularly or in large numbers on the project site, and any impacts to the populations of the species would affect only a very small portion of the regional population. Thus, project impacts to special-status wildlife species would be less than significant.

Sensitive Natural Communities

No sensitive natural communities exist on the project site; however, Seal Slough is considered a sensitive natural community and is identified as waters of the U.S. (up to the high tide line) and waters of the State (up to the top of bank). Project construction could result in indirect impacts to Seal Slough through mobilization of sediments and contaminants during construction. In addition, the project proposes the installation of new exterior lighting. Additional lighting along Seal Slough could increase predation, decrease habitat availability (for species that show aversions to increased lighting), cause alterations of physiological processes if development under the proposed project produces appreciably greater illuminance than the existing conditions, and cause increased bird collisions. While the project would stay outside the top of bank of Seal Slough, the project shall be required to implement the following standard measures, which would ensure impacts to sensitive natural communities would be less than significant:

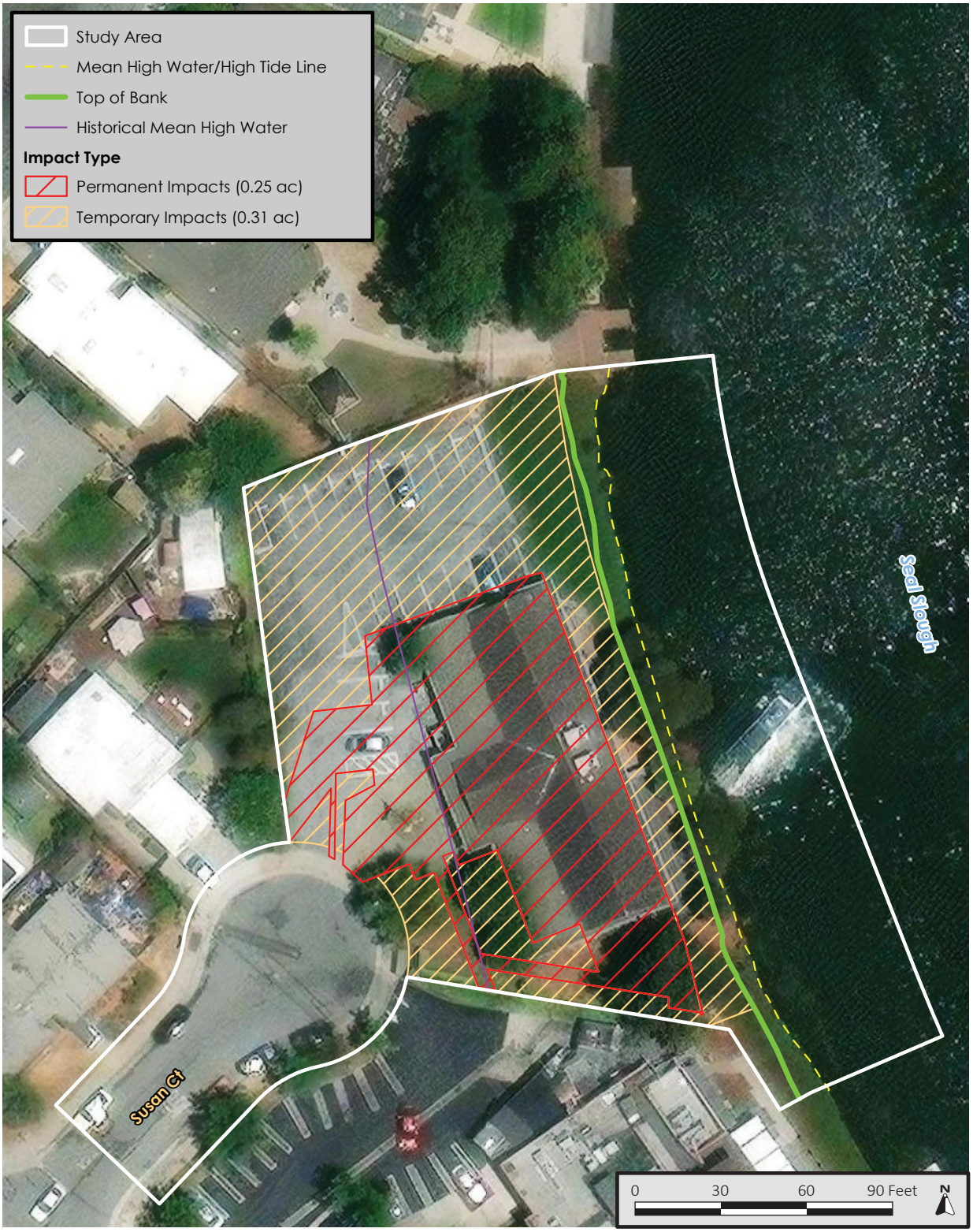
Standard Measures:

- **Worker Environmental Awareness Training.** Personnel involved in construction adjacent to Seal Slough shall be trained by a qualified biologist in the importance of the muted tidal environment to aquatic animals and plants, and the environmental protection measures put in place to prevent impacts to these species and their habitats. The training shall include, at a minimum, a review of the aquatic animals and plants, and sensitive habitats, that could be found in or downslope from work areas; measures to avoid and minimize adverse effects on those resources; and a review of all conditions and requirements of environmental permits.
- **Erosion and Sedimentation Control.** During construction, the project shall employ standard construction BMPs to treat and minimize runoff. Construction BMPs shall be reviewed and coordinated with the RWQCB, as necessary, for implementation during work and may include but are not limited to the following:
    - Measures to avoid sediment mobilization into Seal Slough shall be in place prior to the onset of project construction within 10 feet above top of bank and shall be monitored and maintained until construction activities have been completed. Temporary stockpiling of excavated or imported material shall occur only in approved construction staging areas above top of bank. Stockpiles that are to remain on the site throughout the wet season shall be protected to prevent erosion.
    - No litter, debris, sediment, or other material shall be allowed to move into areas below top of bank. All litter and construction debris shall be disposed of off-site in accordance with state and local regulations. All trash and debris within the work area shall be placed in containers with secure lids before the end of work each day in order to reduce the likelihood of predators being attracted to the site by discarded food wrappers and other rubbish that may be left on-site. If containers meeting these criteria are not available, all rubbish shall be removed from the project site at the end of each work day.
    - Equipment staging and parking of vehicles shall occur on established access roads and flat surfaces.

    - The integrity and effectiveness of construction fencing and erosion control measures shall be inspected on a daily basis. Corrective actions and repairs shall be carried out immediately for fence breaches and ineffective BMPs.
    - Fueling, washing, and maintenance of vehicles shall occur in developed habitat, away from Seal Slough. Equipment shall be regularly maintained to avoid fluid leaks. Any leaks shall be captured in containers until equipment is moved to a repair location. Hazardous materials shall be stored only within the developed habitat. Containment and cleanup plans shall be prepared and put in place for immediate cleanup of fluid or hazardous materials spills.
    - Absorbent materials designated for spill containment and clean-up activities shall be available on site for use in an accidental spill.
    - At no time shall sediment-laden water be allowed to enter Seal Slough.
- **Environmentally Sensitive Area Fencing.** Orange construction barrier fencing will be installed at the limits of construction activities above top of bank along Seal Slough to identify the edge of construction limits and keep construction activities and personnel outside of the sensitive areas below top of bank.
- **Lighting Impact Reduction Measures.** Except as required for code-required accessible ingress/egress routes or security purposes, the following measures will be implemented to minimize increases in spillover of lighting into, or glare/increased luminance perceived by animals using, Seal Slough, 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 increases in undesirable spill light towards Seal Slough. All new exterior lighting shall be fully shielded to block illumination from shining outward towards Seal Slough, and to prevent the lit portions of these fixtures (i.e., the lamps) from being visible to fish or birds in the water, to the extent feasible. All replacement exterior lighting shall be shielded and/or oriented so that illumination of Seal Slough and visibility of lamps from the water do not exceed baseline conditions. Uplighting will be avoided.
    - Increases in spillage of lighting from building interiors, relative to baseline conditions, 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.

Wetlands

As discussed above, Seal Slough is considered waters of the U.S. (up to the high tide line) and waters of the State (up to the top of bank). No project activities would occur within the waters of the U.S. (i.e., within the high tide line) or waters of the State (i.e., within top of bank); thus, the project would not result in any direct impacts to wetlands. Project construction could result in temporary impacts to wetlands through mobilization of sediments and contaminants during construction; however, standard measures, as described under the Sensitive Natural Communities section, would ensure temporary impacts to wetlands would be less than significant.



Source: H.T. Harvey & Associates, September 2024.

PROJECT FEATURES AND IMPACTS | FIGURE 5

Nesting Birds

If construction of the proposed project occurs during the bird nesting season (February 1 to August 31), construction activities have the potential to impact nesting birds that are protected under the Migratory Bird Treaty Act (MBTA). In compliance with the MBTA and the California Fish and Game Code, the proposed project shall implement the following standard measures to avoid construction-related impacts to nesting raptors and their nests:

Standard Measures:

- **Seasonal Avoidance.** To the extent feasible, tree removal, demolition, and the start of construction activities should 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 will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.
- **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 should 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 will 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.
- **Buffers.** If an active nest is found within areas that would be disturbed by project activities, the ornithologist will determine the extent of a construction-free buffer zone to be established around the nest (typically 300 ft for raptors and 100 ft for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation.
- **Nest Deterrence.** 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.

Implementation of the measures described above is standard practice for virtually all construction projects that have trees or are located near trees and is not unusual to the project. Implementation of these measures would ensure that the project would have a less than significant impact on nesting and migratory birds that may be present at the project site during construction.

Noise and Vibration

A Noise and Vibration Assessment, prepared by Illingworth & Rodkin, Inc. in November 2023, evaluated the proposed project's construction noise and vibration impacts on surrounding land uses (see Appendix B).

Construction Noise

Based on the Municipal Code, a significant construction noise impact would occur if construction noise exceeds either of the following thresholds:

1. An individual piece of equipment produces a noise level exceeding 90 dBA at a distance of 25 feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet as possible.
2. The noise level outside of any point outside the property plane of the project exceeds 90 dBA.

The Noise and Vibration Assessment modeled construction noise from the anticipated construction equipment to be used on-site. As shown in Table 1 below, no piece of equipment would exceed 90 dBA at a distance of 25 feet.

Table 1: Estimated Construction Noise Level from Equipment at 25 feet

Construction Equipment	Quantity	Estimated Construction Noise Level at 25 feet, dBA L_{eq}
Skid steer loader with gimbal mount	1	86*
Tractor	1	86
Concrete Truck	1	81
Generator	1	84
Air Compressor	1	80

The Noise and Vibration Assessment also modeled construction noise at the nearest receptors around the project site. Table 2 shows the estimated construction noise levels at the nearest receptors would not exceed 90 dBA at the property line.

Table 2: Estimated Construction Noise Level at Nearest Receptors

Calculated Worst-Case Hourly Average Noise Levels, dBA L_{eq}				
1512 Roberta Drive Residence (120 ft[b])	1510 Roberta Drive Residence (130 ft[b])	1506 Roberta Drive Residence (105 ft[b])	1519 Susan Court Residence (95 ft[b])	South Commercial (85 ft[b])
75	75	77	78	78

Noise levels represent two loudest equipment from Table 1 operating simultaneously and propagated to the surrounding property lines. The distances shown in the table were conservatively measured from the center of the project site to the receiving property lines.

Table 1 and Table 2 show that construction noise levels for each piece of equipment do not exceed 90 dBA at 25 feet and noise levels do not exceed 90 dBA at any point outside the project property line. Thus, the project would have a less than significant construction noise impact. The project, however, would be required to implement the following standard measure to further reduce construction noise:

Standard Measures:

- Construction shall be limited to the hours from 7:00 a.m. to 7:00 p.m. Monday through Friday, Saturdays between 9:00 a.m. and 5:00 p.m. and Sundays and holidays between 12 noon and 4:00 p.m. Any work outside of these hours by the construction contractors shall require an approved written application from the Building Official per San Mateo Municipal Code 23.06.061. There should be compelling reasons for permitting construction outside of these designated hours.
- The contractor shall use "new technology" power construction equipment with state-of-the-art noise shielding and muffling devices. All internal combustion engines used on the project site shall be equipped with adequate mufflers and shall be in good mechanical condition to minimize noise created by faulty or poorly maintained engines or other components.
- Staging areas and stationary noise-generating equipment shall be located as far as possible from noise-sensitive receptors.
- Substitute nail guns for manual hammering and electrically powered tools for noisier pneumatic tools, where feasible.
- A designated "noise disturbance coordinator" would respond to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and shall require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

Construction Vibration

The California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, which typically consist of buildings constructed since the 1990s. Conservative vibration limits of 0.3 in/sec PPV has been used for buildings that are found to be structurally sound but where structural damage is a major concern. For historical buildings or buildings that are documented to be structurally weakened, a cautious limit of 0.08 in/sec PPV is often used to provide the highest level of protection. No historical buildings are present in the project area; thus, this analysis uses a conservative 0.3 in/sec PPV threshold for construction vibration impacts.

Construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used in the vicinity of nearby sensitive land uses. Construction activities would include excavation, helical pile installation, drainage improvements, and landscaping. Pile driving (which generates substantial vibration) is not proposed as a method of construction.

Table 3 summarizes the vibration levels from construction activities at buildings within the project's area of effect.

Table 3: Vibration Source Levels for Construction Equipment				
Equipment		**PPV (in/sec) Estimated at Nearest Buildings Adjoining the Project Site**		
		North Residences (65 ft)	**West Residences (50 ft)**	**South Commercial (50 ft)**
Clam shovel drop		0.071	0.094	0.094
Hydromill (slurry wall)	in soil	0.003	0.004	0.000
	in rock	0.006	0.008	0.001
Vibratory Roller		0.073	0.098	0.098
Hoe Ram		0.031	0.042	0.042
Large bulldozer		0.031	0.042	0.042
Caisson drilling		0.031	0.042	0.042
Loaded trucks		0.027	0.035	0.035
Jackhammer		0.012	0.016	0.016
Small bulldozer		0.001	0.001	0.001

As shown in Table 3 above, vibration levels at surrounding buildings would not exceed the 0.3 in/sec PPV threshold. Thus, the project would have a less than significant construction vibration impact.

(d) Scenic Highways: A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway.

The nearest officially designated state scenic highway is Interstate 280 (I-280), located approximately four miles southwest of the project site.[1] The project site is not visible from I-280 at this distance; therefore, the project would not result in damage to any scenic resources within view of an officially designated state scenic highway.

(e) Hazardous Waste Sites: A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

The project site is not included on any lists compiled pursuant to Section 65962.5 of the Government Code. Therefore, no exceptions to the exemption apply under 15300.2(e). Additionally, there are no sites included on any such list that are adjacent to the project site.

[1] California Department of Transportation. California State Scenic Highway System Map. Accessed September 26, 2023. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

(f) Historical Resources: A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

The project would be limited to renovating the existing library building and constructing minor site improvements within existing paved areas (i.e., ADA improvements, site drainage). The existing library is not designated as a historic resource on any federal, state, or local registries. The existing library, however, was constructed in 1966 and is over 50 years in age, which could make it eligible for historic status. A Cultural Resources Evaluation (CRE), prepared for the project by Architectural/Historical Consultants in September 2023, evaluated the existing library building against the National Register of Historic Places (NHRP) criteria to determine if the building qualifies as a historic resource.[2] The report concluded that the library does not qualify as a historic resource under NRHP criteria because the building is not associated with any significant historical events, significant historical figures, or significant architectural styles. Thus, the proposed project would have no impact on historic resources.

The project site was previously tidal marsh, until the 1950s when the site was filled and developed with the library in 1966. Native American archaeological sites are typically found in flat areas within 200 feet of a perennial source of fresh water. Tidal marshes were not easily inhabited by people and do not provide a fresh source of water; therefore, the project site has low sensitivity of archaeological resources. The project, however, would require excavation to install the helical piles and other exterior improvements which could, while unlikely, encounter previously unknown archaeological resources. The project would be required to implement the following standard measures to avoid impacts to archaeological resources, if encountered during construction.

Standard Measures:

- **Archaeological Resources.** In the event of the discovery of archaeological resources whether on-site or in the public right-of-way, the applicant shall halt all construction activities, notify the Planning Manager and/or Project Manager and retain a qualified archaeologist. The archaeologist shall evaluate the uniqueness of the find, contact local Native American and historical organizations for proposed recommendations for continuing construction, and submit a summary of findings to the Project Planner. The applicant shall incorporate the recommendations of the local Native American and historical organizations when continuing construction.
- **Cultural Resources.** In the event of the discovery of human remains whether on-site in the public right-of-way, the applicant shall halt all activity within 50 feet of the discovery and notify the Planning Manager and/or Project Manager. The applicant shall also immediately notify San Mateo County Coroner to have a determination made as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. Treatment of human remains and any associated or unassociated funerary objects discovered during any soil-disturbing activity within the project site shall comply with applicable State laws. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC) immediately. Once the NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

[2] Archaeological/Historical Consultants. *Cultural Resources Evaluation Marina Library Rehabilitation*. September 2023.

- **Cultural Resources Monitor.** Should construction monitoring be required, the applicant shall submit a scope of work with a cultural resources monitor as prescribed by the Archaeological Monitoring Plan. The scope of work shall indicate that, in the event of a discovery, the monitor:
    - Has stop-work authority to halt all construction activities;
    - Will notify the Planning Manager and/or Project Planner;
    - Will evaluate the discovery to determine whether additional treatment is warranted; and,
    - Will determine adequacy of the evaluation of the discovery prior to authorization of construction activities to resume.
- **Paleontological Resources.** In the event of the discovery of paleontological resources (fossils) whether on-site or in the public right-of-way, the applicant shall halt all construction activities within 50 feet of the discovery, notify the Planning Manager and/or Project Planner, and retain a qualified paleontologist to determine the significance of the discovery. The paleontologist shall evaluate the uniqueness of the find, prepare a written report documenting the find and recommending further courses of action, and submit a summary of findings to the Project Planner. The applicant shall incorporate the recommendations of the paleontologist when continuing construction.

Conclusion

Based on the analysis above, none of the exceptions to categorical exemptions detailed in CEQA Guidelines Section 15300.2 apply to the proposed project.

Appendices

Appendix A: Biological Resources Report
Appendix B: Construction Noise and Vibration Assessment

II. EXISTING FACILITIES CRITERIA

This section documents that the proposed project qualifies for a Class 1 Existing Facilities exemption because it meets the criteria set forth in CEQA Guidelines Section 15301.

CEQA Guidelines Section 15301 – Existing Facilities Projects

Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use.

The project proposes to renovate the existing Marina Branch Library building's foundation, exterior, and interior. In addition, the project would include ADA accessibility improvements along existing paved areas at the entrance to the library and interior spaces, relocate the rear deck to the south side of the library, and add site drainage improvements. The project would not expand the existing library or change the functions or events that occur at it. The project would stabilize the building's foundation and improve ADA access to the library. The project does not intend to attract new users from beyond the current population, primarily San Mateo residents that currently use the existing library.

III. REPLACEMENT OR RECONSTRUCTION CRITERIA

This section documents that the proposed project qualifies for a Class 2 Replacement or Reconstruction exemption because it meets the criteria set forth in CEQA Guidelines Section 15302.

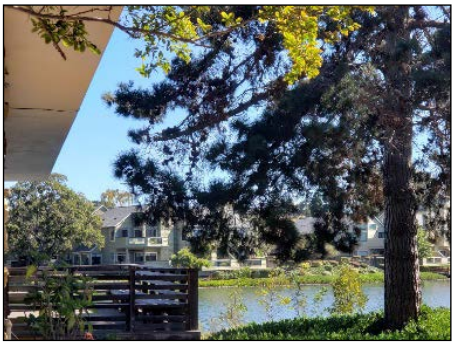
CEQA Guidelines Section 15302 – Replacement or Reconstruction

Class 2 consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced.

The project would reconstruct the foundation of the existing Marina Branch Library building and paved areas at the entrance to the library and interior spaces. The project would not expand the existing library or change the functions or events that occur at it. Therefore, the proposed project would not result in a substantial change in purpose or capacity of the library.

CONCLUSION

The proposed project meets the criteria for a Class 1 and Class 2 exemption and none of the exceptions to the exemptions set forth in CEQA Guidelines Section 15300.2 apply to the project.



H. T. HARVEY & ASSOCIATES

Ecological Consultants

Marina Library Project
Biological Resources Report

H. T. Harvey #4758-01

Prepared for:

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Prepared by:

H. T. Harvey & Associates

December 2, 2024

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Katherine Marlin, M.S., Plant/Wetlands Ecologist
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Section 1. Introduction

This report describes the biological resources present on the Marina Library Project site, as well as the potential biological impacts of proposed project development activities and measures necessary to reduce these impacts to less-than-significant levels under the California Environmental Quality Act (CEQA). This assessment is based on the project's plans and description provided to H. T. Harvey & Associates by the David J. Powers & Associates project team through September 2024.

1.1 Project Location

The approximately 0.84-acre project site consists of a public library located at 1530 Susan Court in in the City of San Mateo (Figure 1). The site is bounded by Seal Slough to the east, commercial buildings to the south, and residential buildings to the west and north (Figure 2). The project site is located on the *San Mateo*, *California* 7.5-minute United States Geological Survey (USGS) quadrangle.

The project site is located adjacent to Seal Slough. Seal Slough has a muted tidal connection to San Francisco Bay via a tide gate at O'Neill Slough that allows water to enter Seal Slough during high tides. A low volume of freshwater inflow from lesser drainages and stormwater runoff enters Seal Slough, and there is a pump station at the mouth of Seal Slough that pumps water out of Seal Slough during high-water conditions (e.g., following storm events) to prevent flooding of properties along Seal Slough and the tributary drainages.

1.2 Project Description

The Marina Branch Library has experienced severe differential settlement. Currently, the floor sloping in the interior has created an unsafe environment for both patrons and library staff. The preliminary geotechnical and structural findings indicate that underpinning of existing foundations on the interior and perimeter will be required to stabilize the structure and re-level the floors.

The project proposes to resolve settlement issues at the library with deep helical piles to underpin the existing foundation. The project would install approximately 158 piles, ranging in size from 2.875-inches to 3.5-inches, at a depth of approximately 60 feet. To install the piles, the existing building's interior floor would be removed to allow access to the foundation. Piles would be screwed into the ground with a bobcat or walk-behind and no pile driving would be required.

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Figure 1. Vicinity Map
Marina Library - Biological Resources Report (4758-01)
December 2024

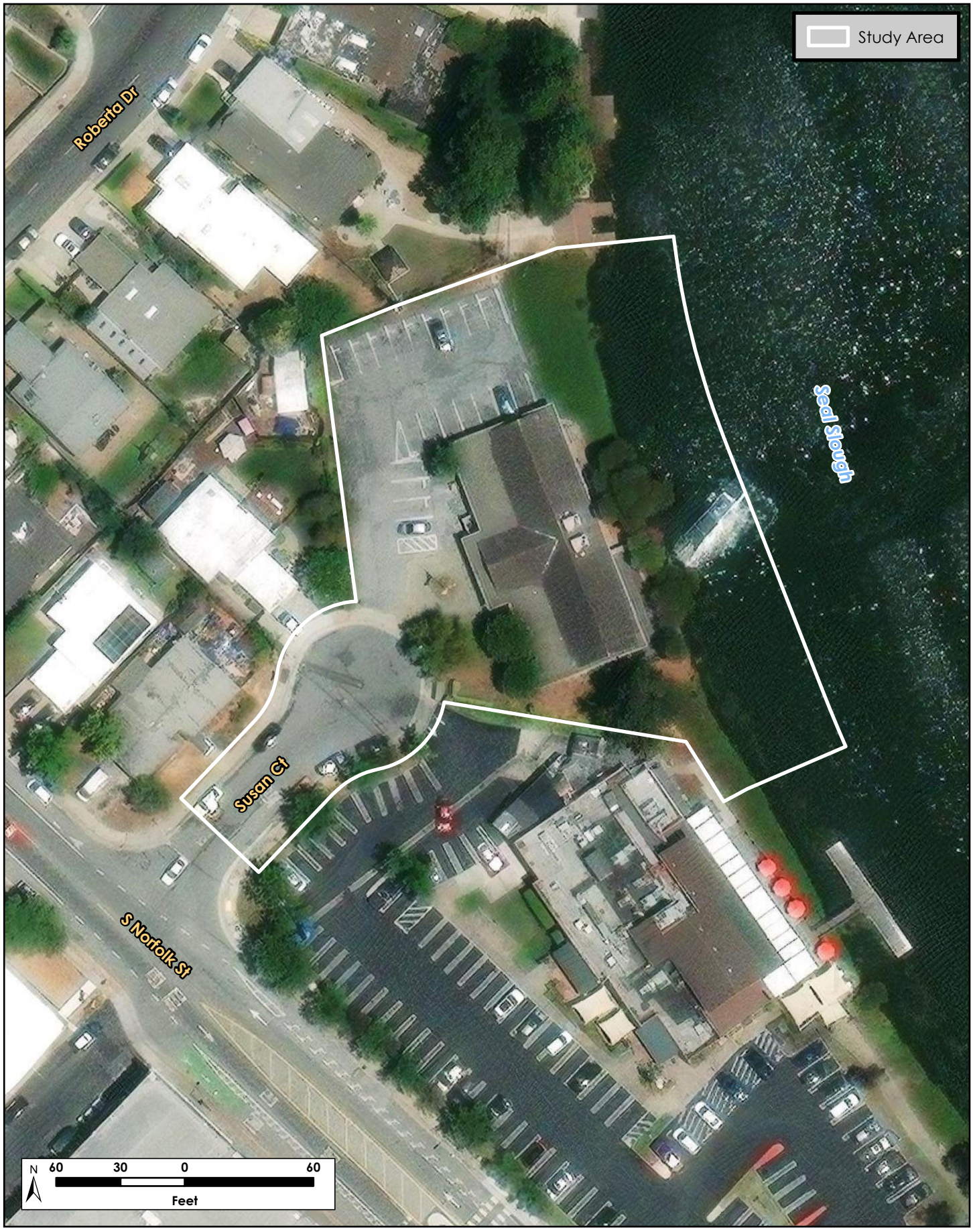

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Figure 2. Study Area
Marina Library - Biological Resources Report (4758-01)
December 2024

The project would also include American with Disabilities Act (ADA) accessibility improvements throughout the site and interior spaces. Site drainage improvements such as adding gutters to the building and replacement of landscaping around the library perimeter would also be implemented by the project. In addition, the project would remove the rear deck to allow access for pile installation and relocate it to the southside of the library. Other minor exterior/interior improvements (e.g., roof replacement, lighting, external/indoor painting, flooring, HVAC equipment, electrical fixtures, restrooms, etc.) would also be completed. New lighting on the east side of the building, adjacent to Seal Slough, will be minimized to that necessary for code-required accessible ingress/egress routes or security purposes. Lighting changes will include the following:

- Existing building mounted fixtures facing the lagoon will be replaced with shielded downcast fixtures.
- New parking lot lighting with back side shielding.
- New lighting at the front of the site, along the new accessible pathway at the south of the property to the deck, and on the deck.

The extent and general locations of exterior glazing are not proposed to be modified substantially, compared to existing conditions.

A buffer would be established around the building to facilitate construction access, and a laydown area would be established in the existing parking lot. This construction access area will be wide enough to accommodate construction equipment for helical pile installation. The project would remove several ornamental trees from the project site and remove limbs of trees as necessary for construction access. All construction activity will occur above the top of bank along Seal Slough, so there will be no project impacts within the slough or its banks.

Section 2. Methods

2.1 Background Review

Prior to conducting a site visit, H. T. Harvey and Associates ecologists reviewed background information on the sensitive biological resources potentially present in and immediately adjacent to the project site. A study area was established for this review that included a portion of Seal Slough to the east and Susan Court to the south (Figure 2). The information reviewed included records from the California Natural Diversity Database (CNDDB 2024) and the California Native Plant Society's (CNPS's) Online Rare Plant Inventory (2024), focused on the *San Mateo, California* 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.* Our searches focused on the distribution and habitats of vascular plants designated as California Rare Plant Rank (CRPR) 1A, 1B, 2A, 2B, 3, or 4 that occur in any of the USGS quadrangles listed above.

We reviewed CNDDB records for special-status animals and natural communities of concern in the vicinity of the study area, defined in this report as the area within a 2-mile (mi) radius of the project site. Additionally, the Natural Resources Conservation Service (NRCS) Web Soil Survey was used to identify soils that underlay the project site (NRCS 2024), and the U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI) Wetlands Mapper was consulted to review pre-existing mapping of aquatic features, including wetlands, streams, and sloughs, that may be present in the project site (NWI 2024). Historical aerial imagery of the project site obtained from Google Earth Pro (Google, Inc. 2024) was also evaluated. In addition, we reviewed records of birds recorded in the site vicinity in eBird (Cornell Lab of Ornithology 2024). Other information reviewed included various technical publications available through the USFWS, California Department of Fish and Wildlife (CDFW), and other sources.

We also reviewed the City of San Mateo General Plan draft and final EIRs (City of San Mateo 2010). The project site is part of the City of San Mateo General Plan area, and development on the site is therefore subject to requirements of the General Plan and its EIR, as appropriate.

2.2 Site Visits

H. T. Harvey & Associates wildlife ecologist Zachary Hampson, B.S., and plant ecologist Katherine Marlin, M.S., surveyed the study area on September 27, 2023. The purpose of this survey was to (1) assess existing biotic habitats and plant and animal communities in the project site, (2) assess the site for its potential to support special-status species and their habitats, and (3) identify potential jurisdictional habitats (such as Waters of the U.S./state), although a formal wetland delineation was not conducted at that time.

H. T. Harvey & Associates mapped biotic habitats within the project site using a combination of field observations (recorded via the Apple iPad GIS Kit Pro application) and aerial imagery signatures. Habitat types

were distinguished using natural community descriptions discussed in Holland (1986), Sawyer et al. (2009), and CDFW's Vegetation Classification and Mapping (CDFW 2024). Plant species within each habitat were identified using Baldwin et al. (2012). Habitat acreages were calculated using geographic information systems (GIS) and aerial imagery interpretation.

Katherine Marlin surveyed the study area for wetlands and other waters, in accordance with the Corps of Engineers 1987 Wetlands Delineation Manual (Corps Manual) (Environmental Laboratory 1987). The purpose of the survey was to identify the extent and distribution of wetlands and other waters that may be subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and the San Francisco Bay Conservation and Development Commission (BCDC). The site was surveyed on foot to locate potential features within and adjacent the study area, which was defined as an area comprising the project site, plus a buffer extending into Seal Slough to the northeast and Susan Court to the southwest (Figure 2). Regulated habitats were mapped using aerial imagery in ArcGIS and field-based ground-truthing techniques. Data points were mapped using a submeter Global Positioning System (GPS).

Section 3. Regulatory Setting

Biological resources within the project footprint are regulated by a number of federal, state, and local laws and ordinances, as described below.

3.1 Federal Regulations

3.1.1 Clean Water Act

The Clean Water Act (CWA) functions to maintain and restore the physical, chemical, and biological integrity of waters of the U.S., which include, but are not limited to, tributaries to traditionally navigable waters currently or historically used for interstate or foreign commerce, and adjacent wetlands. Historically, in non-tidal waters, USACE jurisdiction extends to the ordinary high water mark, which is defined in Title 33, Code of Federal Regulations, Part 328.3. If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the ordinary high water mark to the outer edges of the wetlands. In tidal waters, USACE jurisdiction extends to the landward extent of vegetation associated with salt or brackish water or the high tide line. The high tide line is defined in 33 Code of Federal Regulations Part 328.3 as "the line of intersection of the land with the water's surface at the maximum height reached by a rising tide."

In response to the May 25, 2023, Supreme Court decision in *Sackett v. Environmental Protection Agency,* the U.S. Environmental Protection Agency and Department of the Army issued the final "Revised Definition of 'Waters of the United States Conforming," which became effective on September 8, 2023. This revised definition of Waters of the U.S. clarifies that wetlands must be adjacent (defined as having a continuous surface connection) to relatively permanent bodies of water to be considered jurisdictional.

Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the absence of Section 401 Water Quality Certification. The State Water Resources Control Board (SWRCB) is the state agency (together with the RWQCBs) charged with implementing water quality certification in California.

Project Applicability: Seal Slough, located adjacent to the project site, is considered waters of the U.S. The proposed project will be conducted entirely above the high tide line formed by management of tidal waters in the slough, outside of waters of the U.S., and no impacts to waters of Seal Slough are proposed. As a result, a Section 404 permit from the USACE will not be necessary for project implementation.

3.1.2 Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 prohibits the creation of any obstruction to the navigable capacity of waters of the U.S., including discharge of fill and the building of any wharfs, piers, jetties, and other

structures without Congressional approval or authorization by the Chief of Engineers and Secretary of the Army (33 U.S.C. 403).

Navigable waters of the U.S., which are defined in 33 CFR, Part 329.4, include all waters subject to the ebb and flow of the tide, and/or those which are presently or have historically been used to transport commerce. The shoreward jurisdictional limit of tidal waters is further defined in 33 CFR, Part 329.12 as "the line on the shore reached by the plane of the mean (average) high water." It is important to understand that the USACE does not regulate wetlands under Section 10, only the aquatic or open waters component of Bay habitat, and that there is overlap between Section 10 jurisdiction and Section 404 jurisdiction. According to 33 CFR, Part 329.9, a waterbody that was once navigable in its natural or improved state retains its character as "navigable in law" even though it is not presently used for commerce as a result of changed conditions and/or the presence of obstructions. Historical Section 10 waters may occur behind levees in areas that are not currently exposed to tidal or muted-tidal influence, and meet the following criteria: (1) the area is presently at or below the mean high water line; (2) the area was historically at or below mean high water in its "unobstructed, natural state"; and (3) there is no evidence that the area was ever above mean high water.

As mentioned above, Section 404 of the CWA authorizes the USACE to issue permits to regulate the discharge of dredged or fill material into waters of the U.S. If a project also proposes to discharge dredged or fill material and/or introduce other potential obstructions in navigable waters of the U.S., a Letter of Permission authorizing these impacts must be obtained from the USACE under Section 10 of the Rivers and Harbors Act.

Project Applicability: Seal Slough is a Historical Section 10 water with muted tidal influence due to a tide gate at O'Neill Slough. Within the study area, a band of uplands adjacent to the slough that was historically above mean high water elevation has dropped below that elevation due to subsidence, and is therefore not within Section 10 jurisdiction despite being below the current mean high water elevation within San Francisco Bay. The current extent of Section 10 waters was mapped to the edge of Seal Slough and corresponds with the high tide line created by water level management within the Slough. The proposed project will be conducted entirely above Section 10 waters. Therefore, a Letter of Permission from the USACE for work within Section 10 waters will not be required.

3.1.3 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects federally listed wildlife species from harm or *take*, which is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." *Take* can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as *take* even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under the FESA only if they occur on federal lands.

The USFWS and the National Marine Fisheries Service (NMFS) have jurisdiction over federally listed, threatened, and endangered species under FESA. The USFWS also maintains lists of proposed and candidate

species. Species on these lists are not legally protected under FESA, but may become listed in the near future and are often included in their review of a project.

Project Applicability: No federally listed plant species occur or have the potential to occur on or near the site, but several federally listed or candidate animal species could occur. No suitable nesting habitat for the federally endangered California Ridgway's rail (*Rallus obsoletus obsoletus*) is present on or near the project site. The project site is adjacent to Seal Slough, which has a muted tidal connection to O'Neill Slough via a tide gate and pump station to maintain water levels. Due to the complete lack of tidal marsh habitat, California Ridgway's rails are not expected to occur within or adjacent to the project site. Small numbers of California least terns (*Sternula antillarum browni*), which are federally listed as endangered, may occasionally forage over Seal Slough adjacent to the site. However, least terns will not nest, roost, or forage elsewhere on the site due to the lack of suitable habitats. The monarch butterfly (*Danaus plexippus*), a federal candidate, is expected to occur on the project site as an occasional migrant, and adults may nectar at flowers on the site. There are multiple ornamental plants around the existing structure which could provide flowers for monarchs to forage. However, no suitable larval hostplants (milkweeds [*Asclepias* spp.]) are present on the site, so this species does not breed there, and this species is not known or expected to form winter roost aggregations on or very near the site.

The federally threatened Central California Coast steelhead (*Oncorhynchus mykiss*) and southern green sturgeon (*Acipenser medirostris*), and the federal candidate longfin smelt (*Spirinchus thaleichthys*), occur in Bay waters, but we do not expect these species to be able to access the immediately adjacent Seal Slough due to the previously mentioned tide gate. A 2018 communication by NMFS biologist Gary Stern stated that "neither the tide gate between Marina Lagoon and O'Neill Slough nor the pump station between Marina Lagoon and Seal Slough provide sufficient fish passage to allow Central California Coast steelhead or southern green sturgeon to access Seal Slough." Therefore, Mr. Stern considered these species to be absent from the study area. Therefore, we do not expect listed fish to enter Seal Slough.

In summary, the project is not expected to result in take of any federally listed, proposed, or candidate species.

3.1.4 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act governs all fishery management activities that occur in federal waters within the United States' 200-nautical-mile limit. The Act establishes eight Regional Fishery Management Councils responsible for the preparation of fishery management plans (FMPs) to achieve the optimum yield from U.S. fisheries in their regions. These councils, with assistance from the NMFS, establish Essential Fish Habitat (EFH) in FMPs for all managed species. Federal agencies that fund, permit, or implement activities that may adversely affect EFH are required to consult with the NMFS regarding potential adverse effects of their actions on EFH, and respond in writing to recommendations by the NMFS.

Project Applicability: As mentioned in Section 3.1.3, many fish are prevented from entering Seal Slough by the tide gate and pump station. However, some fish are present in the slough, and it is possible that some fish species that are federally managed under the Coastal Pelagic FMP, such as northern anchovy (*Engraulis mordax*)

or Pacific sardine (*Sardinops sagax*), or the Pacific Groundfish FMP, such as various rockfish, soles, and sharks, could occasionally enter the slough. Therefore, it is possible that NMFS may consider Seal Slough to be EFH. However, the project will implement water-quality best management practices (BMPs) during construction to avoid adverse effects on EFH and FMP-managed fish species.

3.1.5 Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section 703, prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA protects whole birds, parts of birds, and bird eggs and nests, and it prohibits the possession of all nests of protected bird species whether they are active or inactive. An *active* nest is defined as having eggs or young, as described by the USFWS in its June 14, 2018 memorandum "Destruction and Relocation of Migratory Bird Nest Contents". Nest starts (nests that are under construction and do not yet contain eggs) and inactive nests are not protected from destruction.

Project Applicability: All native bird species that occur within the project footprint are protected under the MBTA.

3.1.6 Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) prohibits the take of marine mammals, with certain exceptions, in waters under the jurisdiction of the U.S. or by citizens of the U.S. on the high seas, as well as the importation of marine mammals and marine mammal products into the U.S. Take is defined as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." Harassment is defined as "any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild; or has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering."

Project Applicability. Pacific harbor seals (*Phoca vitulina richardsi*) and California sea lions (*Zalophus californianus*), which are protected under the MMPA, are known to occur in open Bay waters. However, the tide gate on O'Neill Slough and pump station at the mouth of Seal Slough would prevent these species from accessing the waters of Seal Slough adjacent to the project site. Therefore, these species are not expected to occur in the project vicinity.

3.2 State Regulations

3.2.1 Porter-Cologne Water Quality Control Act

The SWRCB works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect waters of the state. Their authority comes from the CWA and the

Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne broadly defines waters of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach overlaps and may exceed the boundaries of waters of the U.S. For example, Water Quality Order No. 2004-0004-DWQ states that "shallow" waters of the state include headwaters, wetlands, and riparian areas. Moreover, the San Francisco Bay Region RWQCB's Assistant Executive Director has stated that, in practice, the RWQCBs claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters, jurisdiction is taken to the top of bank.

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

Pursuant to the CWA, projects that are regulated by the USACE must also obtain a Section 401 Water Quality Certification permit from the RWQCB. This certification ensures that a proposed project will uphold state water quality standards. Because California's jurisdiction to regulate its water resources is much broader than that of the federal government, proposed impacts on waters of the state require authorization by the RWQCB even if the area occurs outside of USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements even if the USACE does not. Under Porter-Cologne, the SWRCB and the nine regional boards also have the responsibility of granting CWA National Pollutant Discharge Elimination System (NPDES) permits and Waste Discharge Requirements for certain point-source and non-point discharges to waters. These regulations limit impacts on aquatic and riparian habitats from a variety of urban sources. Further, when impacts occur to RWQCB jurisdiction but not to waters of the U.S. governed by the federal CWA, Waste Discharge Requirements may be used as a permitting vehicle for impacts in lieu of a 401 Certification.

Project Applicability: All areas considered waters of the U.S., as described in Section 3.1.1 above, are also waters of the state. Waters of the state may additionally extend landward to the tops of the banks along Seal Slough. The proposed project will be conducted entirely above the top of bank, outside of waters of the state, and no impacts to waters of the state are proposed. As a result, no Waste Discharge Requirements or 401 certification from the RWQCB will be necessary.

3.2.2 California Endangered Species Act

The California Endangered Species Act (CESA; California Fish and Game Code, Chapter 1.5, Sections 2050-2116) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with CESA, the CDFW has jurisdiction over state-listed species (Fish and Game Code 2070). The CDFW regulates activities that may result in *take* of individuals (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of *take* under the California Fish and Game Code. The CDFW, however,

has interpreted *take* to include the "killing of a member of a species which is the proximate result of habitat modification."

Project Applicability: No state listed plant species have the potential to occur in the study area. The only wildlife species listed under CESA that have any potential to occur in the vicinity of the project site are the endangered California Ridgway's rail and California least tern, the threatened longfin smelt, and the candidate Crotch's bumble bee (*Bombus crotchii*). As described in Section 3.1.3 above, suitable habitat for the California Ridgway's rail is absent from the study area and immediately adjacent areas, and the longfin smelt cannot access the immediately adjacent Seal Slough due to the tide-control infrastructure constructed at the mouth of the slough. The California least tern may forage in adjacent waters of Seal Slough (at least occasionally and in low numbers) but not on the site itself. The likelihood of occurrence of the Crotch's bumble bee on the project site is very low; some flowers that may provide suitable nectar and pollen sources are present in the ornamental landscaping, but due to the intensively urbanized surroundings, it is unlikely that the species occurs on the site at all, and if it does occur, it would likely do so as an occasional forager rather than nesting on the site. No take of any of these species, as defined by CESA, will result from the project, so no incidental take permit from CDFW will be necessary for state-listed species.

3.2.3 California Environmental Quality Act

CEQA is a state law that requires state and local agencies to document and consider the environmental implications of their actions and to avoid or reduce significant environmental impacts of projects that they approve when it is feasible to do so by adopting project alternatives or mitigation measures that can substantially lessen or avoid those effects. CEQA requires the full disclosure of the environmental effects of agency actions, such as approval of a general plan update or the projects covered by that plan, on resources such as air quality, water quality, cultural resources, and biological resources. The State Natural Resources Agency promulgated guidelines for implementing CEQA known as the State CEQA Guidelines.

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

The CDFW has produced three lists (amphibians and reptiles, birds, and mammals) of "species of special concern" that serve as "watch lists". Species on these lists are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Thus, their populations should be monitored. They may receive special attention during environmental review as potential rare species, but do not have specific statutory protection. All potentially rare or sensitive species, or habitats

capable of supporting rare species, are considered for environmental review per CEQA Guidelines Section 15380(b).

The CNPS, a non-governmental conservation organization, has developed CRPRs for plant species of concern in California in the CNPS Inventory of Rare and Endangered Plants. The CRPRs include lichens, vascular, and non-vascular plants, and are defined as follows:

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

The CRPRs are further described by the following threat code extensions:

- .1—seriously endangered in California;
- .2—fairly endangered in California;
- .3—not very endangered in California.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing as CRPR 1B or 2 are, in general, considered to meet CEQA's Section 15380 criteria, and adverse effects to these species may be considered significant. Impacts on plants that are listed by the CNPS on CRPR 3 or 4 are also considered during CEQA review, although because these species are typically not as rare as those of CRPR 1B or 2, impacts on them are less frequently considered significant.

Compliance with CEQA Guidelines Section 15065(a) requires consideration of natural communities of special concern, in addition to plant and wildlife species. Vegetation types of "special concern" are tracked in Rarefind (CNDDB 2024). Further, the CDFW ranks sensitive vegetation alliances based on their global (G) and state (S) rankings analogous to those provided in the CNDDB. Global rankings (G1–G5) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas S rankings are a reflection of the condition of a habitat within California. If an alliance is marked as a G1–G3, all of the associations within it would also be of high priority. The CDFW provides the Vegetation Classification and Mapping Program's (VegCAMP's) currently accepted list of vegetation alliances and associations (CDFW 2024).

Project Applicability: All potential impacts on biological resources will be considered during CEQA review of the project in the context of this biological resources report. Project impacts are discussed in Section 6 below.

3.2.4 California Fish and Game Code

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. A *stream* is defined in Title 14, California Code of Regulations Section 1.72, as "a body of water that follows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." Using this definition, CDFW extends its jurisdiction to encompass riparian habitats that function as a part of a watercourse. California Fish and Game Code Section 2786 defines *riparian habitat* as "lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source." The lateral extent of a stream and associated riparian habitat that would fall under the jurisdiction of CDFW can be measured in several ways, depending on the particular situation and the type of fish or wildlife at risk. At minimum, CDFW would claim jurisdiction over a stream's bed and bank. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.

Pursuant to California Fish and Game Code Section 1603, CDFW regulates any project proposed by any person that will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds." California Fish and Game Code Section 1602 requires an entity to notify CDFW of any proposed activity that may modify a river, stream, or lake. If CDFW determines that proposed activities may substantially adversely affect fish and wildlife resources, a Lake and Streambed Alteration Agreement (LSAA) must be prepared. The LSAA sets reasonable conditions necessary to protect fish and wildlife, and must comply with CEQA. The applicant may then proceed with the activity in accordance with the final LSAA.

Certain sections of the California Fish and Game Code describe regulations pertaining to protection of certain wildlife species. For example, Code Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian except as provided by other sections of the code.

The California Fish and Game Code Sections 3503, 3513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered *take* by the CDFW. Raptors (e.g., eagles, hawks, and owls) and their nests are specifically protected in California under Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the

code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered take by the CDFW.

Project Applicability: The majority of water coming into Seal Slough is from San Francisco Bay, with a proportionally much smaller amount of freshwater input from lesser drainages and stormwater runoff. Typically, CDFW does not take jurisdiction over tidal sloughs that lack connectivity to nontidal streams, though it is possible that CDFW could regulate Seal Slough due to input from several small drainages. Whether or not CDFW regulates impacts to Seal Slough, the proposed project will be conducted entirely above the top of bank, outside of areas that might be subject to CDFW regulation. As a result, no LSAA from CDFW will be necessary.

Most native bird, mammal, and other wildlife species that occur on the project site and in the immediate vicinity are protected under the California Fish and Game Code. Project impacts on these species are discussed in Section 6.

3.2.5 State Water Resources Control Board Stormwater Regulation

Construction Phase. Construction projects in California causing land disturbances that are equal to 1 acre or greater must comply with state requirements to control the discharge of stormwater pollutants under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ, as amended and administratively extended). Prior to the start of construction/demolition, a Notice of Intent must be filed with the SWRCB describing the project. A Storm Water Pollution Prevention Plan must be developed and maintained during the project, and it must include the use of BMPs to protect water quality until the site is stabilized.

Standard permit conditions under the Construction General Permit requires that the applicant utilize various measures including: on-site sediment control BMPs, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances and/or wash racks, among other factors. Additionally, the Construction General Permit does not extend coverage to projects if stormwater discharge-related activities are likely to jeopardize the continued existence, or result in take of any federally listed endangered or threatened species.

Post-Construction Phase. In many Bay Area counties, including San Mateo County, projects must also comply with the California RWQCB, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit (Water Board Order No. R2-2015-0049, as amended). This permit requires that all projects implement BMPs and incorporate Low Impact Development practices into the design that prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site. In order to meet these permit and policy requirements, projects must incorporate the use of green roofs, pervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors.

Project Applicability. The project's ground disturbance will affect less than 1 acre, and therefore no stormwater pollution prevention plan will be necessary.

3.2.6 McAteer-Petris Act

The McAteer-Petris Act, enacted on September 17, 1965, serves as a legal provision under California state law to preserve San Francisco Bay from indiscriminate filling. The act initially established BCDC as a temporary state agency charged with preparing a plan for the long-term use of the San Francisco Bay. In August 1969, the McAteer-Petris Act was amended to make BCDC a permanent regulatory agency to incorporate the policies of the Bay Plan (BCDC 2020). BCDC jurisdiction includes the San Francisco Bay up to mean high water elevation and a 100-foot wide band along the shoreline of the San Francisco Bay. The *shoreline* is defined as all areas that are subject to tidal action from the south end of the San Francisco Bay to the Golden Gate (Point Bonita–Point Lobos), and to the Sacramento River line (a line between Stake Point and Simmons Point, extended northeasterly to the mouth of Marshall Cut). The BCDC will claim all sloughs (specifically marshlands lying between mean high tide and up to 5 feet above mean sea level where marsh vegetation is present); tidelands (lands between mean high tide and mean low tide); and submerged lands (land lying below mean low tide) in this region. The McAteer-Petris Act also requires that "maximum feasible public access, consistent with a project be included as part of each project to be approved by the BCDC."

Project Applicability: BCDC has confirmed that, based on Section 10123 of its regulations, Seal Slough is not subject to BCDC regulation because it is behind a tide gate that has been in place since before the McAteer-Petris Act was enacted on September 17, 1965. Therefore, the project would not need a BCDC permit.

3.3 Local Regulations

3.3.1 City of San Mateo Tree Ordinance

The City of San Mateo Municipal Code, Section 13.40.030 defines a protected tree as a Heritage tree, a Street tree, or a tree designated as protected as part of an approved Planning Application that is subject to Chapter 27.71. A Heritage tree is defined as 1) any oak (*Quercus* spp.) tree with a trunk that has a diameter of ten inches or more (31.4 inches in circumference) measured at 54 inches above natural grade; 2) any other tree with a trunk diameter of fifteen inches (47.1 inches in circumference) or more, measured at 5 inches above natural grade. 3) Trees with more than one stem (arising at or below 54 inches) shall be measured at the smallest diameter point below the main union of all stems unless the union occurs below grade, in which case each stem shall be measured as a stand-alone tree. For oak trees, if one stem is ten inches or more in diameter, the tree will constitute one Heritage tree. For all other species, if one stem is fifteen inches or more in diameter, the tree will constitute one Heritage tree. 4) Any tree or stand of trees designated by resolution of the City Council to be of special historical value or of significant community benefit; or 5) a stand of trees, the nature of which makes each dependent on the others for survival. A Street tree is any woody perennial plant having a single

main axis or stem capable of achieving ten feet or more in height, growing along or within public right of way or planted within public right of way or a designated planting easement.

Requirements regarding pruning and removal of protected trees are described in the City of San Mateo Municipal Code, Section 13.40.090: and include notices and permits required for removal or work significantly affecting protected trees. Requirements regarding tree replacement of removed protected trees are further described in the City of San Mateo Municipal Code, Section 13.40.110. Avoidance and minimization measures for trees to be preserved would include implementation of tree protection zones (i.e., protecting trees that are intended to remain on the site from incidental project disturbance) and development of a tree protection plan by a certified arborist. In addition, the project proponent would be required to comply with the City of San Mateo Municipal Code and submit permit applications for removal or damage of all trees covered by the ordinance.

Project Applicability: Trees potentially subject to the City's tree ordinance are present on the site. The project proposes to remove five trees – a 30-inch-diameter Monterey pine (*Pinus radiata*) that would be removed on the south side of the building meets the criteria for a Heritage tree, though three 12-inch-diameter crape myrtles (*Lagerstroemia* sp.) to be removed in the front of the building and a dead, 9-inch diameter river birch (*Betula nigra*) in the northeast corner of the site do not meet the criteria for protected trees. The project will require notice or permit per the City of San Mateo tree replacement guidelines and policies for removal of the Monterey pine.

Section 4. Environmental Setting

4.1 General Project Area Description

The study area is located at the Marina Branch – San Mateo Public Library in the City of San Mateo. The study area is bounded by Seal Slough to the east, the residential property to the north and west, and commercial property to the south (Figure 2). Seal Slough is a muted tidal water.

Seal Slough and adjacent areas, including the project site, consist of land that was historically tidal marsh lands that were diked and dredged since at least 1954. The study area is generally topographically uniform and flat with elevations ranging from approximately 1 to 8 feet (ft) (WGS84) (Google, Inc. 2024). Soils are mapped as Urban land-Orthents, reclaimed complex, 0 to 2 percent slopes, which is a common soil classification for locations along the San Francisco Bay Shoreline that consists of fill soils.

4.2 Land Cover/Habitat Types

The project site is predominantly developed, including existing commercial buildings, surrounding pavement, and associated landscaping; approximately 0.69 acre of the site are considered developed. Additional land cover/habitat types mapped within the study area muted-tidal open water (0.29 acre) and levee ornamental (0.11 acre). These habitat types are depicted on Figure 3 and are described in detail below. Plant species observed during the reconnaissance survey and wetland delineation field work are listed in Appendix A, and representative photos of the Marina Library project site are provided in Appendix B.

4.2.1 Developed

Vegetation. Developed areas comprise 0.69 acre of the study area and represent the most dominant land cover type (Photo 1, Appendix B). This land cover type includes all buildings, paved walkways, and parking areas in the study area. The developed land cover also includes areas that have been planted with landscaping and are maintained on an ongoing basis. Landscaping on the site consists of ornamental trees, shrubs, and turf grasses that are typical of commercial developments in the area. Tree species include planted acacia, Monterey pine, crape myrtle, and birch (*Betula* sp.). Ornamental shrub and herb species include English ivy (*Hedera helix*), sacred bamboo (*Nandina domestica*), jasmine (*Jasminium* sp.), geranium (*Geranium* sp.), periwinkle (*Vinca major*), and roses (*Rosa* sp.). A small amount of invasive, weedy species are present along pavement cracks and edges such as cheeseweed (*Malva parviflora*) and wild lettuce (*Lactuca serriola*).

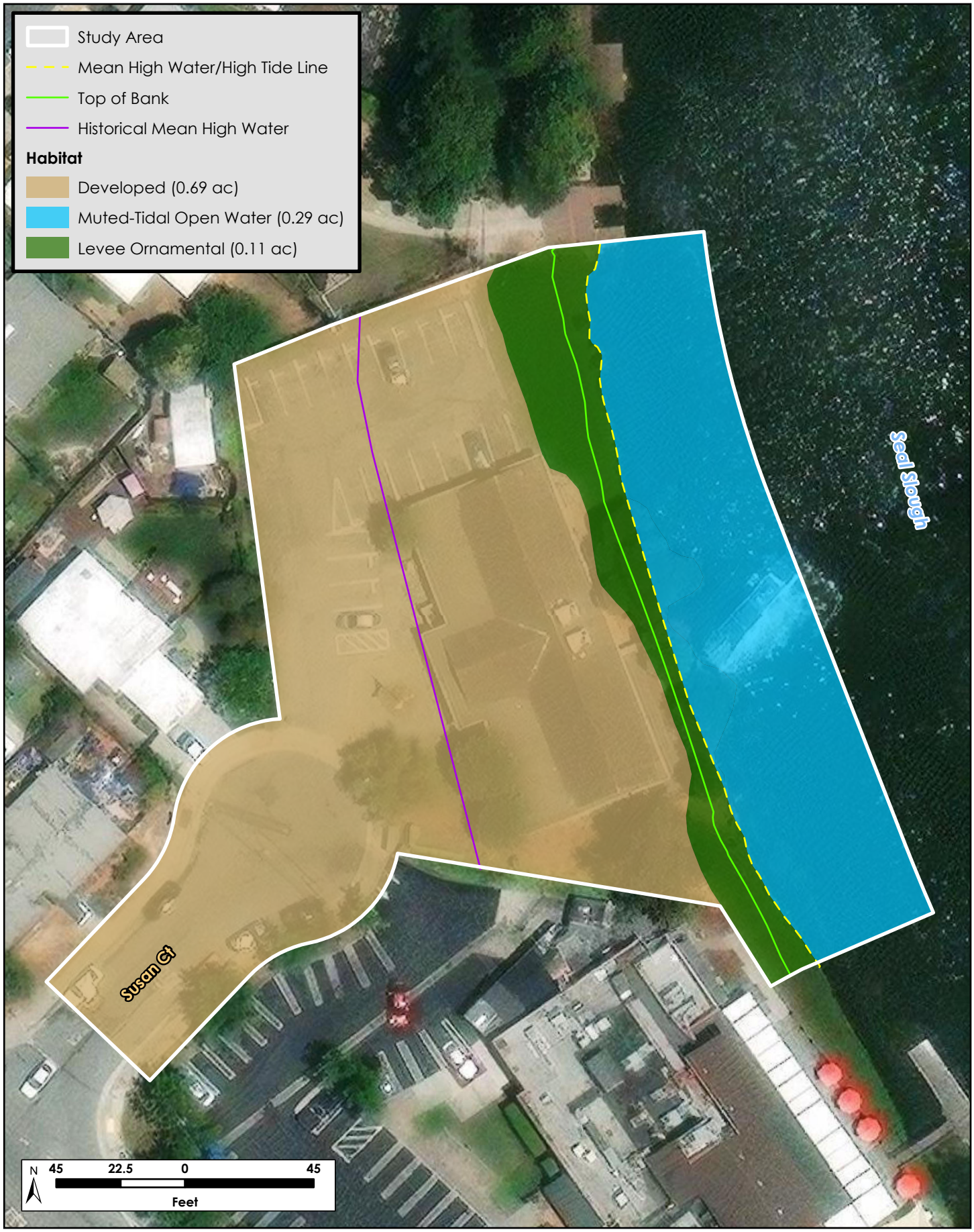

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Figure 3. Habitats and Jurisdictions Map
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Wildlife. Developed areas that are devoid of vegetation do not provide high-quality wildlife habitat; however, a few animals, such as the western fence lizard (*Sceloporus occidentalis*), may bask on these surfaces. Other wildlife most often associated with developed/landscaped areas are those that are tolerant of periodic human disturbance, including introduced species such as the European starling (*Sturnus vulgaris*), rock pigeon (*Columba livia*), house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), and black rat (*Rattus rattus*). The native striped skunk (*Mephitis mephitis*) and raccoon (*Procyon lotor*) also often occupy developed or ruderal habitats near the Bay and likely occur on the site. Some common, native bird species are also able to utilize these habitats for nesting and roosting, especially around the ornamental trees. These include the black phoebe (*Sayornis nigricans*), Anna's hummingbird (*Calypte anna*), Bewick's wren (*Thryomanes bewickii*), and house finch (*Haemorhous mexicanus*), all of which were observed on the project site during the reconnaissance surveys. Lighting fixtures and other small structures on the outside of the building on the project site provide suitable nesting habitat for the house finch, Bewick's wren, and black phoebe, as well as for several species that were not observed during the site visit, such as the barn swallow (*Hirundo rustica*), cliff swallow (*Petrochelidon pyrrhonota*), and mourning dove (*Zenaida macroura*). There are multiple mature trees and ornamental shrubs within the study area which provide suitable nesting habitat for species like Anna's hummingbirds and house finches.

No suitable roosting habitat for crevice-roosting bats such as the pallid bat (*Antrozous pallidus*), Yuma myotis (*Myotis yumanensis*), or Mexican free-tailed bat (*Tadarida brasiliensis*) was observed to be present on the buildings and trees on the project site. The outside of the building was inspected for crevices providing bats entry to roost sites; all potential cavities were previously sealed with metal screening. The mature acacia tree between the library and Seal Slough may provide potentially suitable habitat for the occasional nonbreeding individuals of foliage-roosting species such as the hoary bat (*Lasiurus cinereus*). The remainder of vegetation within the project footprint does not provide dense foliage or suitable crevices for bats to roost.

4.2.2 Muted-Tidal Open Water

Vegetation. Seal Slough is an engineered muted tidal channel that was historically tidal marsh lands, then diked and dredged since at least 1954. The primary water source is tidal flow from San Francisco Bay through O'Neill Slough during high tides. Secondarily, there is low volume of freshwater inflow from lesser tributary drainages such as Borel Creek, and stormwater runoff from surrounding uplands. Outflow primarily occurs at the Foster City Lake Pump Staton located on the levee at the mouth of Seal Slough, and water levels are closely managed via pumping to be below water elevations in the open Bay to prevent flooding of areas surrounding the slough. The portion of slough along the study area is about 300 feet across with a depth between 3 and 6 feet. At the time of the September survey, there were neither aquatic nor wetland plant species observed along the waterline in the study area (Photo 2, Appendix B). There is a small Monterey pine overhanging the muted tidal open water habitat, which is a part of the levee ornamental habitat described below in Section 4.2.3.

Wildlife. The muted tidal open water of Seal Slough, immediately east of the project site, supports a variety of fish, waterbirds, and marine mammals. Fish with potential to occur in Seal Slough include the bat ray (*Myliobatis californica*), striped bass (*Morone saxatilis*), and longjaw mudsucker (*Gillichthys mirabilis*). No high-quality breeding or nursery habitat for any fish is present on or immediately adjacent to the project site.

A variety of non-breeding waterbirds that frequently forage for fish and invertebrates in the waters of Seal Slough adjacent to the project site include great egret (*Ardea alba*), lesser scaup (*Aythya affinis*), greater scaup (*Aythya marila*), western gull (*Larus occidentalis*), Caspian tern (*Hydroprogne caspia*), bufflehead (*Bucephala albeola*), mallard, and Clark's grebe (*Aechmophorus clarkii*). However, during the September 27, 2023 reconnaissance survey, only a few gulls, and a passing-by great egret were present on the Slough adjacent to the project site. Due to the lack of open connectivity between Seal Slough and the Bay, waterbird abundance and diversity on the project site is expected to be very limited, though mallards, American coots (*Fulica americana*), and green-winged teal (*Anas crecca*) may forage in the slough in small numbers.

4.2.3 Levee Ornamental

Vegetation. Levee ornamental habitat comprises approximately 0.11 acres in the study area. Although most of this habitat is above top of bank, a portion is below top of bank and adjacent to Seal Slough (Photo 3, Appendix B). This habitat type includes a dense mat of iceplant (*Carpobrotus* sp.) and an Monterey pine, the dripline of which may be claimed as jurisdictional by RWQCB. About a fourth of the levee ornamental area is shaded by the Monterey pine and primarily fed by irrigation or irrigation runoff. Within the portion below top of bank, the slope is approximately 5% throughout the area with a 3-4 foot vertical drop off along the water.

Wildlife. Animals characteristic of the San Francisco Bay Area are not expected to use the ornamental levee habitat within the project area. The habitat is dominated by a mat of iceplant which provides low quality foraging, resting, and breeding habitat for all species of nesting birds. This habitat is not sufficiently extensive or structurally diverse (e.g., dense/tall) to provide suitable nesting habitat for the San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*), or Alameda song sparrow (*Melospiza melodia pusillula*), and those species would occur on the project site only as occasional dispersants. Ducks such as mallards (*Anas platyrhynchos*) and gadwalls (*Mareca strepera*) could rest in the mat of iceplant. Wildlife using the ornamental levee habitats on the project site would consist primarily of species associated with adjacent habitats. House finches, bushtits, yellow-rumped warblers, American crows, and other birds, as well as house mice, black rats, raccoons, and striped skunks, could forage or travel through the limited ornamental levee habitat on the project site.

4.3 Invasive Species

A few nonnative and invasive plant species occur in the study area. Species with a "high" invasive rating by the California Invasive Plant Council (Cal-IPC) have the potential to cause severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment, and most are widely distributed ecologically (Cal-IPC 2024). In the study area, species with a "high" rating included English ivy and iceplant.

Species with a "moderate" rating by Cal-IPC have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure, and that their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment would be generally dependent upon ecological disturbance (Cal-IPC 2024). The only species on the project site with a "moderate" rating included periwinkle.

4.4 Wildlife Movement

Wildlife movement within and in the vicinity of the project footprint takes many forms, and is different for the various suites of species associated with these lands. Bird and bat species move readily over the landscape in the project vicinity, foraging over and within both natural lands and landscaped areas. Mammals of different species move within their home ranges, but also disperse between patches of habitat. Generally, reptiles and amphibians similarly settle within home ranges, sometimes moving to central breeding areas, upland refugia, or hibernacula in a predictable manner, but also dispersing to new areas. Some species, especially among the birds and bats, are migratory, moving into or through the project vicinity during specific seasons. Aside from bats, there are no other mammal species in the vicinity of the site that are truly migratory. However, the young of many mammal species disperse from their natal home ranges, sometimes moving over relatively long distances in search of new areas in which to establish.

Movement corridors are segments of habitat that provide linkage for wildlife through the mosaic of suitable and unsuitable habitat types found within a landscape while also providing cover. On a broader level, corridors also function as paths along which wide-ranging animals can travel, populations can move in response to environmental changes and natural disasters, and genetic interchange can occur. In California, environmental corridors often consist of riparian areas along streams, rivers, or other natural features.

Due to the density of development in the project region and the lack of continuous, well-vegetated pathways through the nearby urban areas, there are currently no well-defined movement corridors for animals within or through the project site. Wildlife species may move through the area using cover and refugia as they find them available. However, connectivity along Seal Slough is interrupted by numerous residential properties with fences and private docks which extend beyond the bank of Seal Slough.

Migratory birds, including waterbirds associated with the Bay and terrestrial species, migrate along the edge of San Francisco Bay. For example, nocturnal migrant birds that find themselves over the Bay in the morning will seek roosting and foraging areas along the edge of the Bay, and potentially within Seal Slough or the project area. As a result, occasional migrant birds are expected to occur in the study area, or at least move through/past the study area.

Section 5. Special-Status Species and Sensitive Habitats

CEQA requires assessment of the effects of a project on species that are protected by state, federal, or local governments as "threatened, rare, or endangered"; such species are typically described as "special-status species". For the purpose of the environmental review of the project, special-status species have been defined as described below. Impacts on these species are regulated by some of the federal, state, and local laws and ordinances described in Section 3 above.

For purposes of this analysis, "special-status" plants are considered plant species that meet one or more of the following criteria:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, rare, or a candidate species.
- Listed by the CNPS as CRPR 1A, 1B, 2, 3, or 4.

For purposes of this analysis, "special-status" animals are considered animal species that meet one or more of the following criteria:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Designated in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).
- Protected by the MMPA.
- Of particular regional importance ecologically or economically; such species include the Pacific herring (*Clupea pallasii*) and Olympia oyster (*Ostrea lurida*).

Information concerning threatened, endangered, and other special-status species that potentially occur on the project site was collected from several sources and reviewed by H. T. Harvey & Associates biologists as described in Section 2.1 above. Figure 4 depicts CNDDB records of special-status plants and Figure 5 depicts CNDDB records animal species and critical habitat in the 2-mile vicinity of the project site. These generalized maps show areas where special-status species are known to occur or have occurred historically.

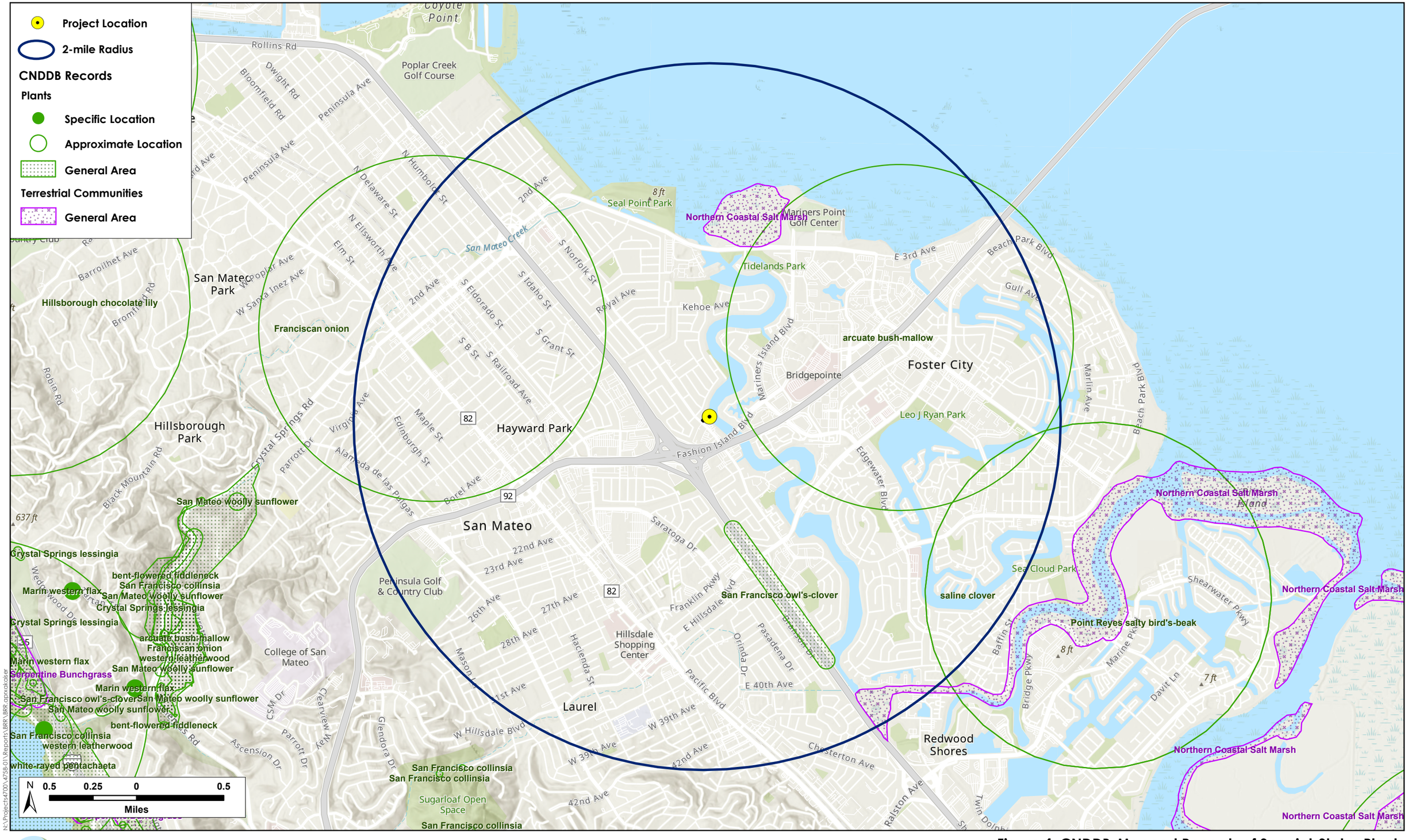

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Figure 4. CNDDB-Mapped Records of Special-Status Plants
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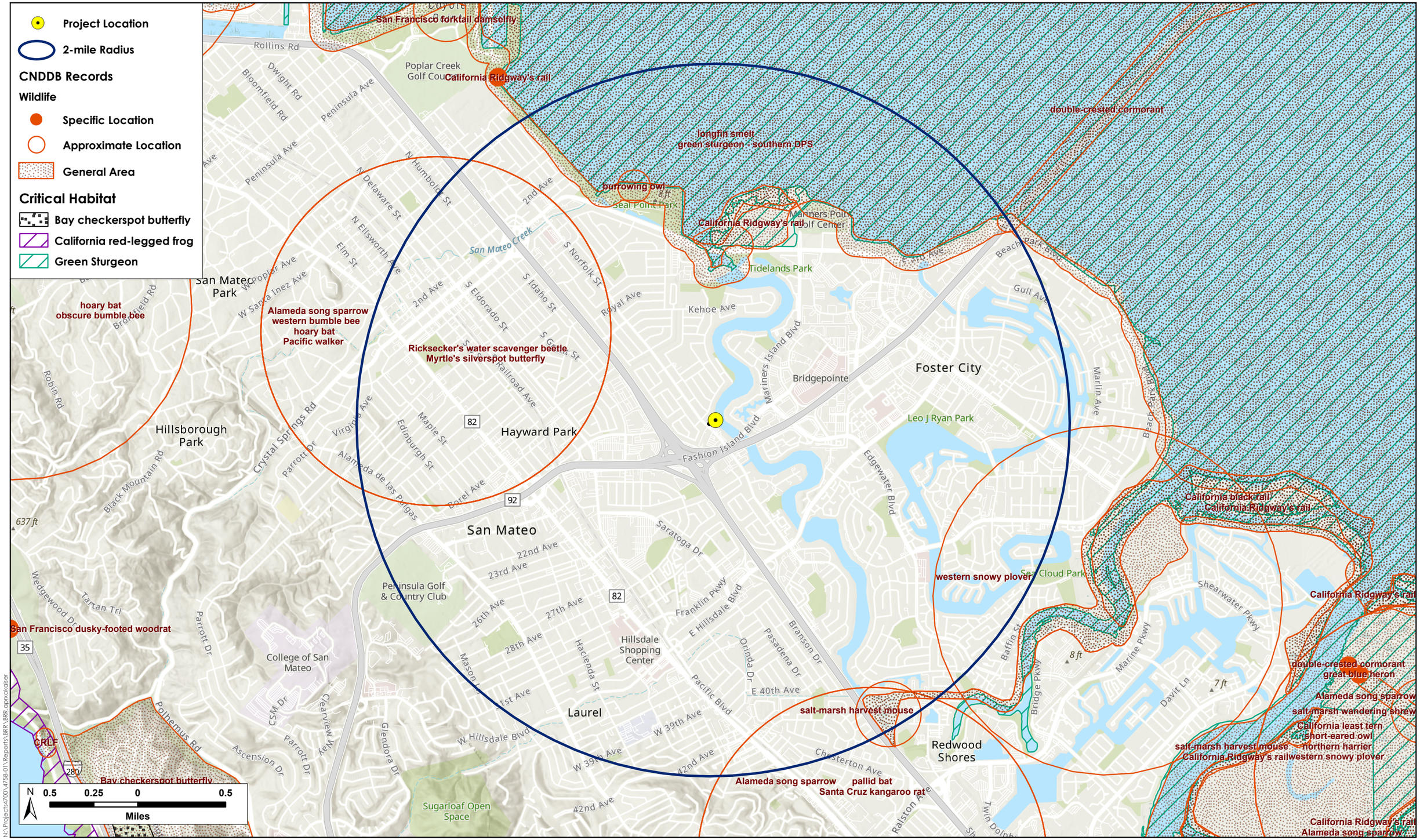

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Figure 5. CNDDB-Mapped Records of Special-Status Animals and Critical Habitat

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5.1 Special-Status Plant Species

A list of 97 special-status plant species thought to have some potential for occurrence in the general vicinity of Burlingame was compiled using CNPS lists (CNPS 2024) and CNDDB records (CNDDB 2024). Analysis of the documented habitat requirements and occurrence records associated with all of the species considered allowed us to reject all but one of the 97 species as not having a reasonable potential to occur in or immediately adjacent to the study area for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range on the study area; and/or (4) the species is presumed extirpated. The study area is a developed site and is situated on Bay fill that would have historically been either open waters or tidal marsh but that, in most areas, does not provide suitable habitat for special-status plants. The muted tidal open water in the eastern portion of the study area is not expected to provide suitable habitat for special-status plant species that are typically found in salt marsh due to the disturbed nature of this feature and the likelihood that it was formed after the fill placement that formed the current shoreline.

No suitable habitat, edaphic requirements, and elevation range for any special-status plant species occur on or immediately adjacent to the project site, and therefore, no special-status plants are present.

5.2 Special-Status Animal Species

The legal status and likelihood of occurrence on the project site of special-status animal species known to occur, or potentially occurring, in the project region are presented in Table 1. Most of the special-status species listed in Table 1 are not expected to occur on the project site because it lacks suitable habitat, is outside the known range of the species, and/or is isolated from the nearest known extant populations by development or otherwise unsuitable habitat. Animal species not expected to occur on the project site for these reasons include the Bay checkerspot butterfly (*Euphydryas editha bayensis*), mission blue butterfly (*Icaricia icarioides missionensis*), San Bruno elfin butterfly (*Callophrys mossii bayensis*), Callippe silverspot butterfly (*Speyeria callippe callippe*), Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*), western bumble bee (*Bombus occidentalis occidentalis*), California red-legged frog (*Rana draytonii*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), western snowy plover (*Charadrius alexandrinus nivosus*), California Ridgway's rail, California black rail (*Laterallus jamaicensis coturniculus*), white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), burrowing owl (*Athene cunicularia*), salt marsh harvest mouse (*Reithrodontomys raviventris*), long-eared owl (*Asio otus*), tricolored blackbird (*Agelaius tricolor*), pallid bat, Townsend's big-eared bat (*Corynorhinus townsendii*), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), salt marsh wandering shrew (*Sorex vagrans halicoetes*), and northwestern pond turtle (*Actinemys marmorata*).

Several special-status species can occasionally occur on or immediately adjacent to the project site as nonbreeding migrants, dispersants, or foragers (i.e., they do not nest on the project site). These are the Crotch's bumble bee (*Bombus crotchii*), California least tern, Vaux's swift (*Chaetura vauxi*), olive-sided flycatcher (*Contopus cooperi*), San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), yellow warbler (*Setophaga petechia*),

Alameda song sparrow (*Melospiza melodia pusillula*), Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*), and western red bat (*Lasiurus blossevillii*). Similarly, the monarch butterfly is not known to breed or overwinter on the project site or in the nearby vicinity, but it could occasionally forage in the area and roost on the trees on site during their fall and spring migration. None of these species are expected to occur regularly or in large numbers on the site.

Although the California sea lion and Pacific harbor seal occur in the Bay near the project site, outside of the muted tidal waters of Seal Slough controlled by a pump station and tide gate, these species would not occur on or adjacent to the site itself (e.g., entering Seal Slough) or haul out onto the shoreline adjacent to the site, as the tide gate and pump station would prevent their entry into Seal Slough. The open waters of San Francisco Bay near the site provide potential foraging habitat for the Central California Coast steelhead, green sturgeon, longfin smelt, Pacific lamprey (*Entosphenus tridentatus*), Central Valley fall-run Chinook salmon (*Oncorhynchus tshawytscha*), and Pacific herring. However, these species cannot access Seal Slough due to the tide-control infrastructure, and therefore they cannot occur immediately adjacent to the project site. The Olympia oyster occurs throughout the San Francisco Bay along rocky shorelines, but the shoreline adjacent to the project site does not provide suitable habitat due to the absence of extensive or large rocks and other hard substrates.

Table 1. Special-Status Animal Species, Their Status, and Potential Occurrence on the Project Site

Name	*Status	Habitat	Potential for Occurrence on the Project site
Federal or State Endangered, Threatened, or Candidate Species			
Bay checkerspot butterfly (*Euphydryas editha bayensis*)	FT	Restricted to areas with shallow serpentine-derived or similar soils that have substantial populations of dwarf plantain, a primary larval host plant, and purple owl's clover, a secondary larval and adult host plant.	Absent. No suitable serpentine grassland habitat or larval host plants are present on the project site. Thus, this species is determined to be absent.
Mission blue butterfly (*Icaricia icarioides missionensis*)	FE	Coastal chaparral and coastal grasslands. Larval host plants are *Lupinus* spp.	Absent. The closest known population is located at San Bruno Mountain approximately 7.5 miles north of the project site (CNDDB 2024). No suitable chaparral or grassland habitat is present on or near the project site. Thus, this species is determined to be absent.
San Bruno elfin butterfly (*Callophrys mossii bayensis*)	FE	Coastal mountains near San Francisco Bay in the fog-belt of steep, north-facing slopes. Lives near abundant growth of broadleaf stonecrop (*Sedum spathulifolium*), its larval host plant that grows on rocky outcrops on steep north facing slopes.	Absent. All known San Bruno elfin butterfly populations are restricted to San Bruno Mountain, Milagra Ridge, the San Francisco Peninsula Watershed, and Montara Mountain. No suitable habitat or the larval host plant is present on the project site. Determined to be absent.
Callippe silverspot butterfly (*Speyeria callippe callippe*)	FE	Grasslands of the northern San Francisco Bay region. Larval host plant is *Viola pedunculata*.	Absent. Callippe silverspot butterfly populations in the project vicinity are only known to occur on San Bruno Mountain, Milagra Ridge, the San Francisco Peninsula Watershed, and Montara Mountain. No suitable habitat or the larval host plant is present on the project site. Determined to be absent.
Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*)	FE	Coastal dune and prairie habitat. Larval host plants are violets, typically Viola adunca.	Absent. Although the historical distribution of this species included San Mateo County, its current extant range is believed to be restricted to the region within or near the Point Reyes National Seashore. Additionally, no suitable habitat or the larval host plant are present on the project site. Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence on the Project site
Monarch butterfly (*Danaus plexippus*)	FC	Adults forage on a wide variety of flowers for nectar and occur in a variety of habitats, but egg-laying and larval development occurs on milkweeds, which are more limited in distribution. Typically roosts on the branches and leaves of trees which receive appropriate sun exposure and thermal buffering.	Absent as Breeder. No milkweed was observed on the project site during our site visit, so this species is not expected to breed here. The closest documented overwintering sites are located along the western coastline in San Mateo County and across the San Francisco Bay in Alameda County, approximately 10 miles west and east of the site. No overwintering sites are known from the project area (https://www.westernmonarchcount.org/find-an-overwintering-site-near-you/). Individuals may occur on the project site as occasional migrants, but this species is not expected to form large roosts or to breed on the site. Limited foraging flowers may be present on site, provided by ornamental landscaping.
Western bumble bee (*Bombus occidentalis*)	SC	Meadows and grasslands with abundant floral resources.	Absent. Although the species was historically found throughout much of central and northern California (CDFW 2019a), including the project vicinity, it is not expected to occur on the site due to recent range contractions. Further, this species has not been observed in the project vicinity since the 1960s (CNDDB 2024). Determined to be absent.
Crotch's bumble bee (*Bombus crotchii*)	SC	Grasslands and shrublands with abundant floral resources, undisturbed nesting and overwintering sites.	Absent as Breeder. Although the species was historically found throughout much of central California and portions of northern California (CDFW 2019a), including the project vicinity, it is not expected to occur on the site due to recent range contractions. Further, this species has not been observed in the project vicinity since 1909 (CNDDB 2024). The likelihood of occurrence of the Crotch's bumble bee on the project site is very low. Some flowers that may provide suitable nectar and pollen sources are present in the ornamental landscaping, but due to the intensively urbanized surroundings, it is unlikely that the species occurs on the site at all, and if it does occur, it would likely do so as an occasional forager rather than nesting on the site.

Name	*Status	Habitat	Potential for Occurrence on the Project site
Central California coast steelhead (*Oncorhynchus mykiss*)	FT	Cool streams with suitable spawning habitat and conditions allowing migration between spawning and marine habitats.	Absent. Central California Coast steelhead occur in the San Francisco Bay and are known to spawn in the San Mateo Creek watershed (Spence et al. 2008, Becker and Reining 2008), but this species is not expected to be present in the immediately adjacent Seal Slough due to tide-control infrastructure preventing access for aquatic species.
Green sturgeon (*Acipenser medirostris*)	FT, CSSC	Spawns in large river systems such as the Sacramento River; forages in nearshore oceanic waters, bays, and estuaries.	Absent. Green sturgeon occur in the San Francisco Bay between the spring and fall (Kelly et al. 2006), but this species is not expected to occur within Seal Slough or near the project site due to access being blocked by tide-control infrastructure.
Longfin smelt (*Spirinchus thaleichthys*)	FC, ST	Spawns in fresh water in the upper end of the San Francisco Bay; may occur year-round in the South Bay.	Absent. Longfin smelt occur in the San Francisco Bay, and adults and yearling juveniles may be present as occasional foragers in the open Bay waters near the project site. However, this species will not occur within or immediately adjacent to the project due to the lack of connectivity between Bay waters and Seal Slough.
California red-legged frog (*Rana draytonii*)	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation. May use the undersides of old boards and other debris to rest or aestivate within riparian areas.	Absent. California red-legged frogs are known to occur approximately 6 miles northwest of the site in wetland habitat near the San Francisco Airport, and have been recorded as close as 5.25 miles to the northwest (CNDDB 2024). However, no suitable aquatic breeding or dispersal habitat is present on or surrounding the project site, and intensive development and numerous roadways between areas of known occurrence and the project site preclude dispersal to the site. Thus, California red-legged frogs are determined to be absent from the project site.

Name	*Status	Habitat	Potential for Occurrence on the Project site
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	Permanent or nearly permanent water in a variety of habitats with abundant emergent or riparian vegetation. Females lay eggs in upland habitats, in clay or silty soils in unshaded (often south-facing) areas (Jennings and Hayes 1994).	Absent. The closest known occurrence of northwestern pond turtle is located approximately 8.5 miles west of the site at Crystal Springs Reservoir and potentially suitable aquatic habitat is present approximately 2.5 miles west of the project site just south of the Coyote Point Yacht Club. However, this species is not expected to occur along such urban sloughs as Seal Slough due to the long history of urbanization and land impacts in the project vicinity and its isolation from higher-quality habitats for this species. Determined to be absent.
San Francisco garter snake (*Thamnophis sirtalis tetrataenia*)	FE, SE, SP	Prefer densely-vegetated ponds with an open water component near open hillsides where they can sun themselves, feed, and find cover in rodent burrows (Larsen 1994 as cited in USFWS 2007). May also occupy ponds or pools in or next to streams, streams, lakes, and reservoirs. The species prefers a dense cover of vegetation, such as willows (Salix spp.), bulrushes (*Schoenoplectus* spp.), and cattails (*Typha* spp).	Absent. The San Francisco garter snake occurs at very few locations in San Mateo County. The only known population of San Francisco garter snakes on the east side of the San Francisco peninsula occurs near the San Francisco International Airport, approximately 7.5 miles to the northwest. No suitable habitat for this species is present on the project site, and the site is isolated from the nearest known remaining populations by extensive urbanization. Thus, this species is determined to be absent.
Western snowy plover (*Charadrius alexandrinus nivosus*)	FT, CSSC	Sandy beaches on marine and estuarine shores and salt pannes in San Francisco Bay saline managed ponds.	Absent. No suitable habitat is present on or immediately adjacent to the project site. In the project vicinity, the western snowy plover is restricted to broader coastal beaches and salt panne habitat within former salt ponds. Snowy plovers may occasionally forage along the sandy shoreline of Coyote Point 2 miles west of the project site, but this species is not expected to occur on or close enough to the site to be impacted by the project. Determined to be absent from the project site.

Name	*Status	Habitat	Potential for Occurrence on the Project site
California least tern (*Sternula antillarum browni*)	FE, SE, SP	Nests along the coast on bare or sparsely vegetated, flat substrates. In San Francisco Bay, nests primarily on an old airport runway at the former Alameda Naval Air Station. Forages for fish in open waters.	Absent as Breeder. Least terns are not known or expected to nest on or adjacent to the project site, and this species does not currently nest in the San Mateo County. Least terns forage over open water habitat off the shoreline near Coyote Point 2 miles west of the project site, and likely forage in small numbers in open waters of the Bay adjacent to the project site. However, no suitable nesting habitat is present on or near the site, and the closest known breeding colony occurs at Eden Landing Ecological Preserve, over 8 miles east of the project site (Pearl 2018). Small numbers may occasionally forage in Seal Slough near the project site. There have been multiple sightings of least terns at nearby Sea Cloud park and Shorebird park (Cornell Lab of Ornithology 2024).
Tricolored blackbird (*Agelaius tricolor*)	ST, CSSC	Nests near fresh water in dense emergent vegetation.	Absent as Breeder. Tricolored blackbirds typically nest in extensive stands of tall emergent herbaceous vegetation in non-tidal freshwater marshes and ponds, which are not present in the study area. This species is not known to nest in tidal habitats along the Bay, and has not been recorded nesting in the project vicinity. However, individuals could occasionally forage on site during the nonbreeding season (albeit irregularly and in low numbers).
California Ridgway's rail (*Rallus obsoletus obsoletus*)	FE, SE, SP	Salt marsh habitat dominated by pickleweed and cordgrass.	Absent. The California Ridgway's rail is resident in salt marsh habitat in San Mateo County, particularly where broader areas of well-developed tidal salt marsh are present. The species has been documented near Bayfront Park approximately 5 miles northwest of the site and occasionally near Coyote Point, 2 miles to the west (CNDDB 2024). However, no marsh habitat suitable for breeding, or even for use by dispersing individuals, occurs on or adjacent to the project site. Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence on the Project site
California black rail (*Laterallus jamaicensis coturniculus*)	ST, SP	Breeds in fresh, brackish, and tidal salt marsh.	Absent. Few black rails have been observed in marshes on the east side of the San Francisco peninsula, and most records are from the nonbreeding season (CNDDB 2024, Cornell Lab of Ornithology 2024). The closest suitable nonbreeding habitat is present along the shoreline of the San Francisco International Airport, approximately 5 miles north of the project site. No marsh habitat suitable for breeding, or even for use by dispersing individuals, occurs on or adjacent to the project site. Determined to be absent.
Salt marsh harvest mouse (*Reithrodontomys raviventris*)	FE, SE, SP	Diked and tidal wetlands supporting a mix of halophytic vegetation including common pickleweed, alkali heath (*Frankenia salina*), and fat hen (*Atriplex prostrata*).	Absent. The closest occurrences of the salt marsh harvest mouse were in the early 1990s approximately 5 miles south of the project site at Bair Island, and recent live-trapping documented salt marsh harvest mice in small numbers at Faber Marsh, over 10 miles south of the project site (Statham et al. 2021). The salt marsh harvest mouse is not known to occur on the San Francisco Peninsula north of the San Mateo Bridge (CNDDB 2024). Furthermore, no suitable habitat is present on the project site. Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence on the Project site
California Species of Special Concern			
Pacific lamprey (*Entosphenus tridentatus*)	CSSC	Occupies anadromous habitat in large streams entering the San Francisco and San Pablo Bays. Spawns in cool (shaded), clear, slow-moving rivers and streams supporting gravel, silt, and sand substrates (Moyle et al. 2015).	Absent. In San Mateo County, the Pacific lamprey was historically documented in San Mateo Creek, approximately 1.5 miles northwest of the project site (Goodman and Reid 2017), but is no longer considered to be present likely due to an impassible barrier (Crystal Springs Dam). In the project vicinity, the species is currently known from the Alameda Creek watershed, approximately 8 miles east of the project site (Goodman and Reid 2017). Pacific lamprey adults may infrequently forage in open Bay waters, but no suitable spawning habitat is present on or immediately adjacent to the project site. This species is not expected to occur within Seal Slough due to tide-control infrastructure preventing access.
Central Valley Fall-Run Chinook Salmon (*Oncorhynchus tshawytscha*)	CSSC	Cool rivers and large streams that reach the ocean and that have shallow, partly shaded pools, riffles, and runs.	Absent. Central Valley fall-run Chinook salmon occur in San Francisco Bay, and small numbers of juveniles or fall-run adults may be present as occasional foragers in the open waters of the Bay adjacent to the project site. However, no suitable spawning habitat for this species is present on or adjacent to the project site. This species is not expected to occur within Seal Slough due to tide-control infrastructure preventing access.
Northern harrier (*Circus cyaneus*)	CSSC (nesting)	Nests in marshes and moist fields, forages over large open areas.	Absent. No suitable nesting or foraging habitat is present on this mostly developed site. Determined to be absent.
Burrowing owl (*Athene cunicularia*)	CSSC	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels (*Otospermophilus beecheyi*).	Absent. No suitable nesting or foraging habitat is present on this mostly developed site, and no California ground squirrel burrows or other suitable refugia are present.

Name	*Status	Habitat	Potential for Occurrence on the Project site
Long-eared owl (*Asio otus*)	CSSC (nesting)	Frequents dense riparian and live oak thickets near meadow edges, and nearby woodland and forest habitats, but also may be found in dense conifer stands at higher elevations. This species forages over open areas, where it hunts for rodents and small birds. Breeds from valley foothill hardwood up to ponderosa pine habitats from early March to late July.	Absent. This species is not expected to visit or breed on the project site or in the nearby vicinity of the site. Determined to be absent.
Vaux's swift (*Chaetura vauxi*)	CSSC (nesting)	Nests in snags in coastal coniferous forests or, occasionally, in chimneys; forages aerially.	Absent as Breeder. No suitable nesting habitat is present on or in the vicinity of the site. However, this species forages over the site during migration.
Olive-sided flycatcher (*Contopus cooperi*)	CSSC (nesting)	Breeds in mature forests with open canopies, along forest edges in more densely vegetated areas, in recently burned forest habitats, and in selectively harvested landscapes (Altman and Sallabanks 2000, Robertson and Hutto 2007).	Absent as Breeder. No suitable nesting habitat is present on the site or in the vicinity of the site. May occur as an occasional spring and fall migrant.
San Francisco common yellowthroat (*Geothlypis trichas sinuosa*)	CSSC	Nests in herbaceous vegetation, usually in wetlands or moist floodplains.	Absent as Breeder. No suitable nesting habitat is present on or immediately adjacent to the site, as vegetation along Seal Slough is not sufficiently extensive and lacks suitable structure to support this species. May occur as a scarce nonbreeding visitor on the site.
Yellow warbler (*Setophaga petechia*)	CSSC (nesting)	Nests in riparian habitat, especially that dominated by cottonwoods, willows, and sycamores.	Absent as Breeder. No suitable nesting habitat is present on or adjacent to the site. Occurs as a common spring and fall migrant.

Name	*Status	Habitat	Potential for Occurrence on the Project site
Alameda song sparrow (*Melospiza melodia pusillula*)	CSSC	Nests in salt marsh, primarily in marsh gumplant and cordgrass along channels.	Absent as Breeder. No suitable nesting habitat is present on or immediately adjacent to the site, as vegetation along Seal Slough, is not sufficiently extensive and lacks suitable structure to support this species. May occur as a scarce nonbreeding visitor on the site.
Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*)	CSSC	Nests in pickleweed dominant salt marsh and adjacent ruderal habitat.	Absent as Breeder. No suitable nesting habitat is present on or immediately adjacent to the site, as vegetation within the study area and along adjacent Seal Slough, is not sufficiently extensive and lacks suitable structure to support this species. May occur as a scarce nonbreeding visitor on the site.
Pallid bat (*Antrozous pallidus*)	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and tree crevices or cavities.	Absent. Historically, pallid bats were likely present in a number of locations throughout the project region, but their populations have declined in recent decades. This species has been extirpated as a breeder from urban areas close to the Bay, and is not expected to breed, roost, or forage on the project site. No suitable roosting habitat was detected in crevices, trees or buildings on the site.
Townsend's big-eared bat (*Corynorhinus townsendii*)	CSSC	Roosts in caves, mine tunnels, and occasionally in deep crevices in trees such as redwoods or in abandoned buildings, in a variety of habitats.	Absent. No known extant populations of the Townsend's big-eared bat occur in the site vicinity, and no suitable cavernous roosting habitat is present on the project site. Determined to be absent.
Western red bat (*Lasiurus blossevillii*)	CSSC	Roosts in foliage in forest or woodland habitat, especially in or near riparian habitat.	Absent as Breeder. This species may occur as a migrant and winter resident, but does not breed in the Bay Area. Small numbers of bats may occasionally roost within foliage of trees on the project site, but due to the absence of riparian habitat on or in the vicinity of the site, the potential for occurrence is low.

Name	*Status	Habitat	Potential for Occurrence on the Project site
San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*)	CSSC	Nests in a variety of habitats including riparian areas, oak woodlands, and scrub.	Absent. No woodrat stick nests were observed on the project site. Due to the heavily urbanized nature of the surrounding areas this species does not likely occur on the project site. Determined to be absent.
Salt marsh wandering shrew (*Sorex vagrans halicoetes*)	CSSC	Medium-high marsh 6-8 feet above sea level with abundant driftwood and common pickleweed.	Absent. This species is likely present in broader salt and brackish marshes along the Bay, although its distribution is poorly known. There is a low probability of occurrence in the marsh habitat approximately 5 miles northwest of the site near the San Francisco Airport. However, there is no suitable habitat on the site. Thus, the species is determined to be absent.
California Fully Protected Species			
White-tailed kite (*Elanus leucurus*)	SP	Nests in tall shrubs and trees, forages in grasslands, marshes, and ruderal habitats.	Absent. No suitable nesting or foraging habitat is present on this mostly developed site. Determined to be absent.
Other Special-Status Species			
Pacific herring (*Clupea pallasii*)	CEQA	Spawns in sheltered areas of bays, estuaries, and harbors, and sometimes in nearshore coastal waters. May spawn in intertidal or subtidal waters on manmade structures such as pier pilings and riprap (Watters et al. 2004).	Absent. Pacific herring spawn approximately 2.5 miles west of the site at Coyote Point and elsewhere in the San Francisco Bay (CDFW 2019b), but the immediately adjacent Seal Slough does not provide suitable spawning habitat. Forages in Bay waters immediately near the project site. This species is not expected to occur within Seal Slough due to tide-control infrastructure preventing access.
Olympia oyster (*Ostrea lurida*)	CEQA	Attaches to hard substrates such as rocks, and artificial structures in intertidal habitats of the San Francisco Bay. May also occur in subtidal habitats.	Absent. Occurs throughout the San Francisco Bay along rocky shorelines, but the shoreline adjacent to the project site provides low-quality habitat at best due to the absence of large rocks and other hard substrates. Not expected to occur on the project site itself.

Name	*Status	Habitat	Potential for Occurrence on the Project site
California sea lion (*Zalophus californianus*)	MMPA	Occurs in shallow waters along the eastern North Pacific Ocean and in portions of the San Francisco Bay. Prefers sandy beaches, rocky shorelines, and floating docks.	Absent. Does not breed inside San Francisco Bay, and is not expected to haul out on the shoreline adjacent to the site. Occurs in the Bay near the project site, but tide-control infrastructure prevents access to Seal Slough, thus excluding aquatic species from occurring within or immediately adjacent to the project site.
Pacific harbor seal (*Phoca vitulina richardsi*)	MMPA	Throughout the northern Atlantic and Pacific Oceans along coastal waters, river mouths, and bays.	Absent. Harbor seals are permanent residents of the San Francisco Bay. No pupping sites or suitable haul-out sites are present on or adjacent to the project site, and this species is not expected to haul out on the shoreline adjacent to the site. Occurs in the Bay near the project site, but tide-control infrastructure prevents access to Seal Slough, thus excluding aquatic species from occurring within or immediately adjacent to the project site.

SPECIAL-STATUS SPECIES CODE DESIGNATIONS

FE	=	Federally listed Endangered
FT	=	Federally listed Threatened
FC	=	Federal Candidate for listing
FPT	=	Federally Proposed for listing as Threatened
SE	=	State listed Endangered
ST	=	State listed Threatened
SC	=	State Candidate for listing
CSSC	=	California Species of Special Concern
SP	=	State Fully Protected Species
MMPA	=	Marine Mammal Protection Act
CEQA	=	Species not currently protected by statute or regulation, but considered rare, threatened, or endangered under Section 15380 of the CEQA Guidelines.

5.3 Sensitive Natural Communities, Habitats, and Vegetation Alliances

Natural communities have been considered part of the Natural Heritage Conservation triad, along with plants and animals of conservation significance, since the state inception of the Natural Heritage Program in 1979. The CDFW determines the level of rarity and imperilment of vegetation types, and tracks sensitive communities in its Rarefind database (CNDDB 2024). Global rankings (G) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas state (S) rankings reflect the condition of a habitat within natural communities and are defined using NatureServe's standard heritage program methodology as follows (Faber-Langendoen et al. 2012):

- G1/S1: Critically imperiled
- G2/S2: Imperiled
- G3/S3: Vulnerable
- G4/S4: Apparently secure
- G5/S4: Secure

In addition to tracking sensitive natural communities, the CDFW also ranks vegetation alliances, defined by repeating patterns of plants across a landscape that reflect climate, soil, water, disturbance, and other environmental factors (Sawyer et al. 2009). If an alliance is marked G1–G3, all of the vegetation associations within it will also be of high priority (CDFW 2024). The CDFW provides VegCAMP's currently accepted list of vegetation alliances and associations (CDFW 2024). Impacts on CDFW sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under CEQA (Title 14, Division 6, Chapter 3, Appendix G of the California Code of Regulations). Furthermore, aquatic, wetland and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS.

Sensitive Natural Communities. A query of sensitive habitats in the CNDDB (2024) identified five sensitive natural communities as occurring within the twelve 7.5-minute USGS quadrangles containing or surrounding the project site: (1) northern coastal salt marsh (Rank G3/S3.2), (2) northern maritime chaparral (Rank G1/S1.2), (3) serpentine bunchgrass (Rank G2/S2.2), (4) valley needlegrass grassland (Rank G3/S3.1), and (5) valley oak woodland (Rank G3/S2.1). Northern coastal salt marsh is characterized by Holland (1986) as occurring along sheltered inland margins of bays, often co-dominated by pickleweed, cordgrass, and sometimes saltgrass. The muted tidal open water on the project site does not support any salt marsh vegetation. Sensitive habitats recorded in the region by CNDDB are all absent from the project site.

Sensitive Vegetation Alliances. Much of the levee ornamental area on the project site qualifies as "*Mesembryanthemum* spp. – *Carpobrotus* spp." (21.200.00) which is not considered a sensitive alliance by the CDFW in VegCAMP (CDFW 2024).

Sensitive Habitats (Wetlands and Waters of the U.S./state). The delineation of regulated habitats identified waters of the U.S. and waters of the state on and adjacent to the project site. Seal Slough in the eastern part of the project site is considered waters of the U.S. Waters of the state on the project site include the same areas that were delineated as waters of the U.S., and waters of the state may additionally extend landward to the tops of the banks and up to the canopy dripline of trees rooted below top of bank along Seal Slough. The levee ornamental area along the creek's banks may be considered a "buffer" of waters of the state by the RWQCB, and could potentially also be regulated by CDFW. However, the proposed project will be conducted entirely above the top of bank, and thus no impacts to regulated habitats will occur.

Section 6. Impacts and Mitigation Measures

CEQA and the State CEQA Guidelines provide guidance in evaluating impacts of projects on biological resources and determining which impacts will be significant. The Act defines "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project."

Appendix G of State CEQA Guidelines provides a checklist of other potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G (Chapter IV) may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the project would:

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

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

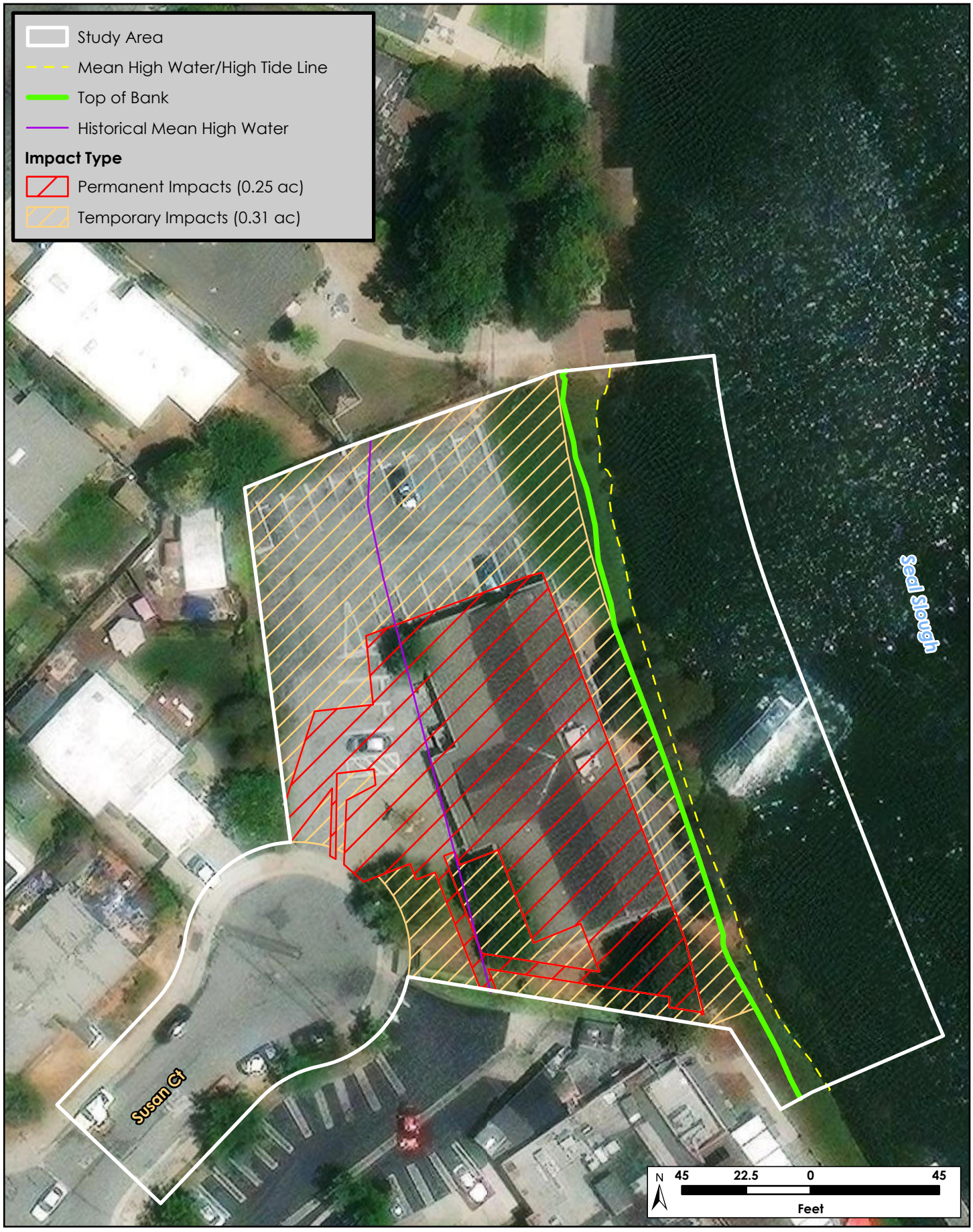
C. "Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means"

D. "interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites"

E. "conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance"

F. "conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan"

Potential impacts on biological resources as a result of the proposed project were systematically evaluated at the project level. These impacts were first evaluated to qualitatively describe how proposed project activities could impact biological resources, and whether impacts would be temporary (i.e., occurring only during project construction and the period immediately following) or permanent. Figure 6 depicts the areas that will be impacted by project activities.



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H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure 6. Project Impacts
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6.1 Impacts on Special-Status Species: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS (Less than Significant with Mitigation)

6.1.1 Impacts on Common Species and Habitats (Less than Significant)

The project will impact virtually all 0.69 acres of developed land uses, as well as approximately 0.07 acres of levee ornamental habitat, on the project site in some way, either through conversion to other developed areas or from landscaping. Individuals of the common plant and animal species that currently inhabit the project site will be impacted through the removal of vegetation and modification of structures, and from landscaping. Those common plant and animal species that occur on the site are regionally abundant and are present in widely available habitats in the region. As a result, the project would impact only a very small proportion of their regional populations. Thus, these impacts do not meet the CEQA standard of having a *substantial* adverse effect, and would not be considered significant under CEQA.

As described in Section 1.2, the extent and general locations of exterior glazing are not proposed to be modified substantially, compared to existing conditions. As a result, avian collisions with glazing on the library would not increase substantially, relative to existing collisions, and bird collision impacts would thus be less than significant.

6.1.2 Impacts on Non-breeding Special-status Animals (Less than Significant)

Several special-status bird species may occur within the study area as nonbreeding migrants, transients, or foragers, but they are not known or expected to breed or occur in large numbers within or near the study area. These species are the California least tern, Vaux's swift, olive-sided flycatcher, San Francisco common yellowthroat, yellow warbler, Alameda song sparrow, and Bryant's savannah sparrow.

The California least tern (a federal and state endangered, and fully protected species) primarily nests in Alameda County, and no suitable nesting habitat is present on or near the site, but this species may forage over the open waters adjacent to the project site. 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 San Francisco common yellowthroat, 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 terrestrial foraging habitats and could disturb foraging or roosting individuals of these species occurring on or adjacent to the project site. 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 will have very little impact on these species' regionally available foraging habitat (and no impact on aquatic foraging habitat for species such as the California least tern) and no substantive impact on regional populations of these species. Rather, the project may improve habitat for some of these species through restoration of more natural habitat, and it is possible that the Alameda song sparrow and San Francisco common yellowthroat could even breed on the project site after the project's landscaping is installed. For all these reasons, impacts of the project on nonbreeding special-status birds would be less than significant.

The western red bat (a California species of special concern) usually roosts in the foliage of trees (Pierson et al. 2006). Day and night roosts are often located along the edges of riparian areas, near streams, grasslands, and even urban areas. During the breeding season, western red bats establish individual tree roosts and occasionally small maternity colonies in riparian habitats (Zeiner et al. 1990). Western red bats do not breed in San Mateo County, but may occasionally be present on the project site as a migrant or winter resident. Unlike most birds, bats experience daily bouts of torpor to save energy during seasonally cool periods. As a result, torpid bats cannot immediately fly away when disturbed, and typically require upwards of 40 minutes to arouse and flee. Therefore, there is some potential for tree removal to injure or kill individual red bats. Although little is known about the habitat use of western red bats during the nonbreeding season (Pierson et al. 2006), western red bats are uncommon, and no more than one or two individuals could be impacted by the project. Because of the low probability of such impacts, and because such limited impacts on the western red bat would affect only a very small proportion of regional populations of these species, project impacts would not rise to the CEQA standard of having a *substantial* adverse effect and would therefore be less than significant.

Monarch butterflies are not known to form roost aggregations along the San Francisco Bay shoreline in the vicinity of the project site, and there is no expectation that such roosts will form in the future in or near the study area. Further, this species is not expected to breed in the study area due to the absence of milkweed, its larval host plant. 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 will be less than significant.

6.1.3 Impacts on Aquatic Habitats and Species (Less than Significant with Mitigation)

The project will have no direct impacts on muted-tidal open water habitats, or fish or other aquatic species that use those habitats, as all project activities will occur above top of bank along Seal Slough. However, the project will include construction in the levee ornamental habitat just above top of bank, and there is some potential for indirect impacts on aquatic habitats and species during construction. For example, in the absence of protective measures, construction could result in a reduction in water quality in Seal Slough due to mobilization of sediments or contaminants (e.g., leaks from construction equipment) during construction, potentially impacting

fish and other aquatic species. Given the ecological importance of any fish present in Seal Slough (e.g., to piscivorous birds), such an impact would be significant. Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 would reduce such impacts to less than significant levels.

Mitigation Measure BIO-1. Worker Environmental Awareness Training. Personnel involved in construction adjacent to Seal Slough shall be trained by a qualified biologist in the importance of the muted tidal environment to aquatic animals and plants, and the environmental protection measures put in place to prevent impacts to these species and their habitats. The training shall include, at a minimum, a review of the aquatic animals and plants, and sensitive habitats, that could be found in or downslope from work areas; measures to avoid and minimize adverse effects on those resources; and a review of all conditions and requirements of environmental permits.

Mitigation Measure BIO-2. Erosion and Sedimentation Control. During construction, the project shall employ standard construction BMPs to treat and minimize runoff. Construction BMPs shall be reviewed and coordinated with the RWQCB, as necessary, for implementation during work and may include but are not limited to the following:

- Measures to avoid sediment mobilization into Seal Slough shall be in place prior to the onset of project construction within 10 feet above top of bank and shall be monitored and maintained until construction activities have been completed. Temporary stockpiling of excavated or imported material shall occur only in approved construction staging areas above top of bank. Stockpiles that are to remain on the site throughout the wet season shall be protected to prevent erosion.
- No litter, debris, sediment, or other material shall be allowed to move into areas below top of bank. All litter and construction debris shall be disposed of off-site in accordance with state and local regulations. All trash and debris within the work area shall be placed in containers with secure lids before the end of work each day in order to reduce the likelihood of predators being attracted to the site by discarded food wrappers and other rubbish that may be left on-site. If containers meeting these criteria are not available, all rubbish shall be removed from the project site at the end of each work day.
- Equipment staging and parking of vehicles shall occur on established access roads and flat surfaces.
- The integrity and effectiveness of construction fencing and erosion control measures shall be inspected on a daily basis. Corrective actions and repairs shall be carried out immediately for fence breaches and ineffective BMPs.
- Fueling, washing, and maintenance of vehicles shall occur in developed habitat, away from Seal Slough. Equipment shall be regularly maintained to avoid fluid leaks. Any leaks shall be captured in containers until equipment is moved to a repair location. Hazardous materials shall be stored only within the developed habitat. Containment and cleanup plans shall be prepared and put in place for immediate cleanup of fluid or hazardous materials spills.

- Absorbent materials designated for spill containment and clean-up activities shall be available on site for use in an accidental spill.
- At no time shall sediment-laden water be allowed to enter Seal Slough.

Mitigation Measure BIO-3. Environmentally Sensitive Area Fencing. Orange construction barrier fencing will be installed at the limits of construction activities above top of bank along Seal Slough to identify the edge of construction limits and keep construction activities and personnel outside of the sensitive areas below top of bank.

6.1.4 Impacts on Animals due to Increased Lighting (Less than Significant with Mitigation)

The installation of lighting on buildings and around roads, paths, and parking lots may result in potential impacts on animal species. Many animals, both special-status and common species, are sensitive to light cues, which influence their physiology and shape their behaviors, particularly during the breeding season (Ringer 1972, de Molenaar et al. 2006). Artificial light has been used as a means of manipulating breeding behavior and productivity in captive birds for decades (de Molenaar et al. 2006), and has been shown to influence the territorial singing behavior of wild birds (Longcore and Rich 2004, Miller 2006, de Molenaar et al. 2006). While it is difficult to extrapolate results of experiments on captive birds to wild populations, it is known that photoperiod (the relative amount of light and dark in a 24-hour period) is an essential cue triggering physiological processes as diverse as growth, metabolism, development, breeding behavior, and molting (de Molenaar et al. 2006). This holds true for mammals and other taxa as well (Beier 2006), suggesting that increases in ambient light may interfere with these processes across a wide range of species, resulting in impacts on wildlife populations. Artificial lighting may also indirectly affect animals by increasing the nocturnal activity of predators such as owls, hawks, and mammalian predators (Negro et al 2000, Longcore and Rich 2004, DeCandido and Allen 2006, Beier 2006). The presence of artificial light may influence habitat use by rodents (Beier 2006) and breeding birds (Rogers et al. 2006, de Molenaar et al. 2006) by causing avoidance of well-lit areas, resulting in a net loss of habitat availability and quality.

Evidence that migrating birds are attracted to artificial light sources is abundant in the literature as early as the late 1800s (Gauthreaux and Belser 2006). Although the mechanism causing migrating birds to be attracted to bright lights is unknown, the attraction is well documented (Longcore and Rich 2004, Gauthreaux and Belser 2006). Migrating birds are frequently drawn from their migratory flight paths into the vicinity of an artificial light source, where they will reduce their flight speeds, increase vocalizations, and/or end up circling the lit area, effectively "captured" by the light (Herbert 1970, Gauthreaux and Belser 2006, Sheppard and Phillips 2015, Van Doren et al. 2017). When birds are drawn to artificial lights during their migration, they may become disoriented and possibly blinded by the intensity of the light (Gauthreaux and Belser 2006). The disorienting and blinding effects of artificial lights directly impact migratory birds by causing collisions with light structures, buildings, communication and power structures, or even the ground (Gauthreaux and Belser 2006). Indirect impacts on migrating birds might include orientation mistakes and increased length of migration due to light-driven detours.

Up-lighting refers to light that projects upwards above the fixture. There are two primary ways in which the luminance of up-lights might impact the movements of birds. First, local birds using habitats on a site may become disoriented during flights among foraging areas and fly toward the lights, colliding with the lights or with nearby structures. Second, nocturnally migrating birds may alter their flight direction or behavior upon seeing lights; the birds may be drawn toward the lights or may become disoriented, potentially striking objects such as buildings, adjacent power lines, or even the lights themselves.

The project will result in modification of buildings and other features (e.g., pedestrian walkways and open space areas) that will 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 can potentially spill into adjacent natural areas such as Seal Slough. Much of the project site is currently lit at night, so it is unknown whether the project will result in an increase in lighting relative to existing conditions. Further, as indicated in Section 1.2, new lighting on the east side of the building, adjacent to Seal Slough, will be minimized to that necessary for code-required accessible ingress/egress routes or security purposes.

However, no detailed information regarding the project's proposed lighting design was available for review as part of this assessment. If lighting of Seal Slough were to increase, animals using this area 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 proposed 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 Seal Slough. In addition, lighting from the project also has some 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 San Francisco 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 Section 6.4.2). Mitigation Measure BIO-4 would reduce impacts of lighting on animals to a less than significant level.

> **Mitigation Measure BIO-4. Lighting Impact Reduction Measures.** Except as required for code-required accessible ingress/egress routes or security purposes, the following measures will be implemented to minimize increases in spillover of lighting into, or glare/increased luminance perceived by animals using, Seal Slough, 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 increases in undesirable spill light towards Seal Slough. All new exterior lighting shall be fully shielded to block illumination from shining outward towards Seal Slough, and to prevent the lit portions of these fixtures (i.e., the lamps) from being visible to fish or birds in the water, to the extent feasible. All replacement

exterior lighting shall be shielded and/or oriented so that illumination of Seal Slough and visibility of lamps from the water do not exceed baseline conditions. Uplighting will be avoided.

- Increases in spillage of lighting from building interiors, relative to baseline conditions, 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.

6.2 Impacts on Sensitive Communities: 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 CDFW or USFWS (Less than Significant with Mitigation)

The CDFW defines sensitive natural communities and vegetation alliances using NatureServe's standard heritage program methodology (CDFW 2024), as described above in Section 5.3. Aquatic, wetland, and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS (see Section 6.3 below). Project impacts on sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, were considered and evaluated.

The project will not result in direct impacts on habitats regulated by any of these resource agencies, as all work will occur above top of bank. In the absence of mitigation measures, indirect impacts on habitat quality in areas below top of bank, or water quality in Seal Slough, would be significant. However, implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 will reduce such impacts to less than significant levels.

6.3 Impacts on Wetlands: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (Less than Significant with Mitigation)

The only Waters of the U.S. within the study area are the muted-tidal waters of Seal Slough. Waters of the U.S., which extend to high tide elevation, will not be directly impacted by project activities, and no project activities will occur within these waters. Waters of the state, which include Seal Slough but also extend to top of bank within the levee ornamental habitat on the project site, will not be directly impacted by project activities, as all project activities will occur above top of bank. Construction activities in the uplands above top of bank may indirectly impact waters of the U.S./state through the inadvertent discharge of fill from construction activities and potential indirect impacts on water quality in Seal Slough. In the absence of mitigation measures, these indirect impacts on waters of the U.S./state are significant impact under CEQA. Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 will reduce these impacts to a less than significant level.

6.4 Impacts on Wildlife Movement: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (Less than Significant with Mitigation)

6.4.1 Impacts on Wildlife Movement (Less than Significant with Mitigation)

As discussed in Section 4.4, 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. However, connectivity along the shore of Seal Slough is interrupted by numerous fences and other infrastructure, i.e., personal docks, associated with the residential properties on either side of the study area. The study area is not a particularly important area for movement by non-flying wildlife, and it does not contain any high-quality corridors allowing dispersal of such animals. For all these reasons, the project will not result in a significant impact on terrestrial animal movement corridors.

If the project incorporates high-intensity lighting, particularly uplighting, there is some potential for the project to interfere with the movement of nocturnally migrating birds as discussed in Section 6.1.4. Implementation of Mitigation Measure BIO-3 would reduce impacts of lighting on migrating birds to a less than significant level.

6.4.2 Impacts on Nesting Birds (Less than Significant)

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 paucity of sensitive habitats on the project site, the habitats on the project site support only regionally common, urban-adapted breeding birds and support only a very small proportion of these species' regional populations. In addition, birds are expected to nest and forage in the study area in greater abundance after project construction is completed due to the proposed landscaping. Therefore, project impacts on nesting birds that use the site, due to habitat impacts or disturbance of nesting birds, would not rise to the CEQA standard of having a substantial adverse effect, and these impacts would not constitute a significant impact on these species or their habitats under CEQA. Nevertheless, all native bird species are protected from direct take by federal and state statutes (see Sections 3.1.5 and 3.2.4). Therefore, Improvement Measures BIO-A, B, C, and D are recommended to ensure that project activities comply with the MBTA and California Fish and Game Code.

Improvement Measure BIO-A. Seasonal Avoidance. To the extent feasible, tree removal, demolition, and the start of construction activities should 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 will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.

Improvement Measure BIO-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 should 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 will 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.

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

Improvement Measure BIO-D. Nest Deterrence. 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.

6.5 Impacts due to Conflicts with Local Policies: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Less than Significant)

6.5.1 Impacts Due to the Removal of Ordinance-Sized Trees (Less than Significant)

The proposed project will remove a Monterey pine on the south side of the building, three crape myrtles in the front of the building, and a river birch in the northeast corner of the site. The 9-inch river birch and 12-inch-diameter crape myrtles to be removed do not meet the criteria for protected trees, but a 30-inch-diameter Monterey pine that would be removed on the south side of the building meets the criteria for a Heritage tree. Per the City of San Mateo Municipal Code, Section 13.40.030, notice and permits are required for the removal or work significantly affecting protected trees, as defined in Section 3.3.1 above. The removal of a tree protected by the City of San Mateo's tree ordinance, in the absence of compliance with the City's Municipal Code, would be considered potentially significant under CEQA. In accordance with the provisions of the City of San Mateo tree protection ordinance, the project will comply with standard City of San Mateo tree removal permit conditions and replace the Monterey pine in accordance with these tree removal policies. Such compliance will reduce any potential impacts due to conflicts with the City's tree preservation ordinance to less-than-significant levels under CEQA.

6.6 Impact due to Conflicts with an Adopted Habitat Conservation Plan: Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan (Less Than Significant)

The San Bruno Mountain Habitat Conservation Plan is the only Habitat Conservation Plan that has been approved in San Mateo County, but this plan does not cover the project site or the surrounding vicinity. No Natural Community Conservation Plans have been approved or are in preparation in San Mateo County. Therefore, the proposed project would not conflict with any adopted Habitat Conservation Plans or Natural Community Conservation Plans, or with any other approved local, regional, or state habitat conservation plans.

6.7 Cumulative Impacts

Cumulative impacts arise due to the linking of impacts from past, current, and reasonably foreseeable future projects in the region. The cumulative impact on biological resources resulting from the project in combination with other projects in the project vicinity and larger region would be dependent on the relative magnitude of adverse effects of these projects on biological resources compared to the relative benefit of impact avoidance and minimization efforts prescribed by planning documents, CEQA mitigation measures, and permit requirements for each project; compensatory mitigation and proactive conservation measures associated with each project. In the absence of such avoidance, minimization, compensatory mitigation, and conservation measures, cumulatively significant impacts on biological resources would occur.

Future development activities in this part of San Mateo may result in impacts on the same habitat types and species that will be affected by the project. Implementation of the project, in combination with other projects in the area and other activities that impact the species that are affected by this project, could contribute to cumulative effects on the biological resources that will be impacted by the project. These projects will all comply with conditions of their local approvals (e.g., CEQA mitigation measures) as well as the conditions of any applicable regulatory agency permits, to avoid, minimize, and mitigate impacts on these resources, thus reducing cumulative impacts.

The Marina Library Project would implement mitigation measures to reduce impacts on biological resources as described above. Thus, the project will not have a cumulatively considerable contribution to cumulative impacts on biological resources.

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Appendix A. Plant Species Observed on the Project Site

Family	Scientific Name	Common Name	WIC[1]
Aizoaceae	*Carpobrotus sp.*	Ice plant	FACU
Apocynaceae	*Vinca major*	Periwinkle	FACU
Araliaceae	*Hedera helix*	English ivy	FACU
Asteraceae	*Lactuca serriola*	Prickly lettuce	FACU
Berberidaceae	*Nandina officinale*	Sacred bamboo	UPL
Betulaceae	*Betula nigra*	River birch	UPL
Fabaceae	*Acacia* sp.	Acacia	UPL
Geraniaceae	*Geranium sp.*	Geranium	UPL
Lythraceae	*Lagerstroemia indica*	Crepe-myrtle	UPL
Malvaceae	*Malva parviflora*	Cheeseweed	UPL
Oleaceae	*Jasminium* sp.	Jasmine	UPL
Pinaceae	*Pinus radiata*	Monterey pine	UPL

1. WIC = Wetland Indicator Code - obtained from Lichvar et al. (2016). When species was not listed, species was assigned UPL Wetland Indicator Code.

Appendix B. Representative Photos of the Project Site

Photo 1. Developed land cover includes the Marina Library building and parking lot. Photo was taken looking eastward on October 28, 2023.

Photo 2. The muted-tidal open water habitat type does not contain any vegetation, as depicted on the right side of the iceplant in this photo. Photo was taken looking northward on October 28, 2023.

Photo 3. The levee ornamental habitat type is dominated by iceplant and ornamental trees. Photo was taken looking southward on October 28, 2023.

SAN MATEO MARINA BRANCH LIBRARY REHABILITATION CONSTRUCTION NOISE AND VIBRATION ASSESSMENT

San Mateo, California

November 13, 2023

♦ ♦ ♦

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INTRODUCTION

This project proposes to resolve severe differential settlement issues at the existing foundation of the Marina Branch Library in San Mateo, California. Deep helical piles are proposed to underpin the existing foundation. The project would also include ADA accessibility improvements at the exterior of the building. This report evaluates the potential for significant construction noise and vibration impacts due to the project and presents measures, where necessary, to mitigate impacts on sensitive receptors in the project vicinity to less-than-significant levels.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (*frequency*) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is the intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level (dBA).* This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This *energy-equivalent sound/noise descriptor* is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from

the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level* (*CNEL*) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The *Day/Night Average Sound Level* (*DNL* or L_{dn}) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Effects of Noise

Sleep and Speech Interference

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA DNL. Typically, the highest steady traffic noise level during the daytime is about equal to the DNL and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12-17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is therefore possible when exterior noise levels are about 57-62 dBA DNL with open windows and 65-70 dBA DNL if the windows are closed. Levels of 55-60 dBA are common along collector streets and secondary arterials, while 65-70 dBA is a typical value for a primary/major arterial. Levels of 75-80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed; those facing major roadways and freeways typically need special glass windows.

Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The DNL as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 50 dBA DNL. At a DNL of about 60 dBA, approximately 12 percent of the population is highly annoyed. When the DNL increases to 70 dBA, the percentage of the population highly annoyed increases to about 25-30 percent of the population. There is, therefore, an increase of about 2

percent per dBA between a DNL of 60-70 dBA. Between a DNL of 70-80 dBA, each decibel increase increases by about 3 percent the percentage of the population highly annoyed. People appear to respond more adversely to aircraft noise. When the DNL is 60 dBA, approximately 30-35 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 3 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 4 percent increase in the percentage of the population highly annoyed.

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 3 displays the reactions of people and the effects on buildings that continuous vibration levels produce.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at much lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving, and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as minor cracking of building elements, or may threaten the integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher and there is no general consensus as to what amount of vibration may pose a threat for structural damage to the building. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max}, L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
		Broadcast/recording studio
	10 dBA	
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

TABLE 3 Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Threshold at which there is a risk of damage to fragile buildings with no risk of damage to most buildings
0.25	Strongly perceptible to severe	Threshold at which there is a risk of damage to historic and some old buildings.
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential structures
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to new residential and modern commercial/industrial structures

Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020.

Regulatory Background – Noise

A summary of the applicable regulatory criteria established by the City of San Mateo is provided below.

City of San Mateo

City of San Mateo General Plan. The Noise Element of the City of San Mateo General Plan sets forth goals and policies to control environmental noise and protect citizens from excessive noise exposure. The goals and policies relevant to this project are summarized below:

GOAL 2: Minimize unnecessary, annoying and unhealthful noise.

POLICIES:

N 2.1: Noise Ordinance. Continue implementation and enforcement of City's existing noise control ordinance: (a) which prohibits noise that is annoying or injurious to neighbors of normal sensitivity, making such activity a public nuisance, and (b) restricts the hours of construction to minimize noise impact.

City of San Mateo Municipal Code: The Noise Regulations of the San Mateo Municipal Code, Chapter 7.30 are set forth to protect the inhabitants of the City against all forms of nuisances.

Section 7.30.060 Special Provisions. Construction, alteration, repair, or land development activities authorized by a valid city permit shall be allowed at the following times:

- Weekdays: between 7:00 a.m. and 7:00 p.m.
- Saturdays: between 9:00 a.m. and 5:00 p.m.
- Sundays and Holidays: between 12:00 p.m. and 4:00 p.m.
- Or at other such hours as authorized or restricted by the permit, so long as they meet the following conditions:
    1. No individual piece of equipment shall produce a noise level exceeding 90 dBA at a distance of 25 feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet as possible.
    2. The noise level outside of any point outside the property plane of the project shall not exceed 90 dBA.

CONSTRUCTION NOISE ANALYSIS

Construction activities for the proposed project would primarily include the installation of deep helical piles to underpin the existing foundation. The project would install approximately 158 piles, ranging in size from 2.875-inches to 3.5-inches in diameter, of 60 feet in length. The existing building's interior floor would be removed to allow access to the foundation and piles would be screwed into the ground with no pile driving required. Project construction also includes ADA accessibility improvements including re-grading and restriping the ADA parking spot and replacing and re-grading entrance ramps and doorways. In addition, the project would relocate the rear deck to the southside of the library, and a new pathway would run along the rear of the building. Exterior entrances, pathways, and deck would also be raised to meet the new interior floor height after helical pile installation. The project would also include site drainage improvements such as new curbs and gutters and re-grading the landscape around the perimeter of the library to promote positive drainage. Other minor exterior/interior improvements (e.g., lighting, external/indoor painting, flooring, HVAC equipment, electrical fixtures, restrooms, etc.) would also be completed.

Construction phases for the project would likely include foundation work involving installation of the helical piles, building exterior work (includes ADA accessibility and site drainage improvements) and building interior work. During each phase of construction, there would be a different mix of equipment operating, and noise levels would vary by phase and vary within phases, based on the amount of equipment in operation and the location at which the equipment is operating.

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

The City's Municipal Code specifies the hours of construction as weekdays between 7:00 a.m. and 7:00 p.m., Saturdays between 9:00 a.m. and 5:00 p.m. and Sundays and holidays between 12 noon and 4:00 p.m. The City's construction noise threshold is specified 90 dBA at 25 feet for each

individual piece of equipment and noise levels outside of the property plane of the project not to exceed 90 dBA.
Table 4 shows the typical range of maximum instantaneous noise levels produced by each piece of equipment at 50 feet. Table 5 shows the hourly average noise level ranges by construction phase, typical for various types of projects measured at 50 feet. For the proposed project, impact or vibratory pile driving, which generates excessive noise levels, is not expected. Micro-piling typically involves equipment small enough that it can enter the building through a door or window.

For the proposed project, a skid steer loader with a gimbal mount would be used for screwing in the helical piles required to strengthen the foundation. Other equipment such as a tractor, concrete truck, generator, and an air compressor would be expected at the site for the exterior and interior improvements.

Federal Highway Administration's (FHWA's) Roadway Construction Noise Model (RCNM) was used to calculate the hourly average noise levels for each phase of construction, assuming the two loudest pieces of equipment would operate simultaneously, as recommended by the FTA for construction noise evaluations. This construction noise model includes representative sound levels for the most common types of construction equipment and the approximate usage factors of such equipment that were developed based on an extensive database of information gathered during the construction of the Central Artery/Tunnel Project in Boston, Massachusetts (CA/T Project or "Big Dig"). The usage factors represent the percentage of time that the equipment would be operating at full power.

Noise levels at 25 feet from each individual piece of equipment are shown in Table 6 below. Due to the nature of the proposed project, no more than two pieces of equipment are expected to operate simultaneously at any point during the construction period. Assuming the two loudest pieces of equipment operate simultaneously, noise levels propagated from the project site to the nearest receptors are shown in Table 7. Distances used in Table 7 assume that noise from construction activities propagate from the "acoustic center" of the project site as per standard acoustical analysis methods. The proposed pieces of equipment are modeled at the approximate center of the area in which most construction activity is likely to occur. Noise levels in Table 7 do not assume reductions due to intervening buildings or existing barriers. Figure 1 shows an aerial image of the project site and the surrounding receptors.

Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain often results in lower construction noise levels at distant receptors.

TABLE 4 Construction Equipment 50-Foot Noise Emission Limits

Equipment Category	L_{max} Level (dBA)[1,2]	Impact/Continuous
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor[3]	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

[1] Measured at 50 feet from the construction equipment, with a "slow" (1 sec.) time constant.

[2] Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.

[3] Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

TABLE 5 Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

I - All pertinent equipment present on site.
II - Minimum required equipment present at site.

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

TABLE 6 Estimated Construction Noise Level from Equipment at 25 feet

Construction Equipment	Quantity	Estimated Construction Noise Level at 25 feet, dBA L_{eq}
Skid steer loader with gimbal mount	1	86*
Tractor	1	86
Concrete Truck	1	81
Generator	1	84
Air Compressor	1	80

*Assuming a noise level of 80 dBA at 50 feet as per supplied project description documents

TABLE 7 Estimated Construction Noise Level at Nearest Receptors

Calculated Worst-Case[a] Hourly Average Noise Levels, dBA L_{eq}				
1512 Roberta Drive Residence (120 ft[b])	1510 Roberta Drive Residence (130 ft[b])	1506 Roberta Drive Residence (105 ft[b])	1519 Susan Court Residence (95 ft[b])	South Commercial (85 ft[b])
75	75	77	78	78

[a] These noise levels represent two loudest equipment from Table 6 operating simultaneously and propagated to the surrounding property lines.
[b] The distances shown in the table were conservatively measured from the center of the project site to the receiving property lines.

FIGURE 1 Aerial Image of the Project Site and Surrounding Area with Acoustic Center of Construction Activities

Tables 6 and 7 show that construction noise levels for each piece of equipment does not exceed 90 dBA at 25 feet and noise levels do not exceed 90 dBA at any point outside the project property line. Therefore, temporary construction noise impacts would be considered **less-than-significant**.

The following best management practices would help to further reduce construction noise levels emanating from the site, and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity.

- Construction shall be limited to the hours from 7:00 a.m. to 7:00 p.m. Monday through Friday, Saturdays between 9:00 a.m. and 5:00 p.m. and Sundays and holidays between 12 noon and 4:00 p.m. Any work outside of these hours by the construction contractors should require a special permit from the City Engineer. There should be compelling reasons for permitting construction outside of these designated hours.

- The contractor shall use "new technology" power construction equipment with state-of-the-art noise shielding and muffling devices. All internal combustion engines used on the project site shall be equipped with adequate mufflers and shall be in good mechanical condition to minimize noise created by faulty or poorly maintained engines or other components.

- Staging areas and stationary noise-generating equipment shall be located as far as possible from noise-sensitive receptors.

- Substitute nail guns for manual hammering and electrically powered tools for noisier pneumatic tools, where feasible.

- A designated "noise disturbance coordinator" would respond to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and shall require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

CONSTRUCTION VIBRATION ANALYSIS

The construction of the project may generate vibration when heavy equipment or impact tools (e.g. jackhammers, hoe rams) are used. Construction activities would include foundation work involving installation of the helical piles, building exterior work (includes ADA accessibility and site drainage improvements) and building interior work. This analysis assumes the proposed project would not require impact or vibratory pile driving, which can cause excessive vibration.

The California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, which typically consist of buildings constructed since the 1990s. Conservative vibration limits of 0.3 in/sec PPV has been used for buildings that are found to be structurally sound but where structural damage is a major concern (see Table 3 above for further explanation). For historical buildings or buildings

that are documented to be structurally weakened, a cautious limit of 0.08 in/sec PPV is often used to provide the highest level of protection.

Table 8 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet. Project construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.), may generate substantial vibration in the immediate vicinity. Jackhammers typically generate vibration levels of 0.035 in/sec PPV and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet.

Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Table 8 also summarizes the distances to the to the 0.3 in/sec PPV threshold for all buildings of conventional construction. There are no documented historical buildings near the project site.

TABLE 8 Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	Minimum Distance to Meet 0.3 in/sec PPV (feet)
Clam shovel drop		0.202	18
Hydromill (slurry wall)	in soil	0.008	1
	in rock	0.017	2
Vibratory Roller		0.210	19
Hoe Ram		0.089	9
Large bulldozer		0.089	9
Caisson drilling		0.089	9
Loaded trucks		0.076	8
Jackhammer		0.035	4
Small bulldozer		0.003	<1

Source: Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, Office of Planning and Environment, U.S. Department of Transportation, September 2018, as modified by Illingworth & Rodkin, Inc., November 2023.

Table 9 summarizes the vibration levels at each of the surrounding buildings in the project vicinity. Vibration levels are highest close to the source and then attenuate with increasing distance at the rate $\left({}^{D_{ref}}/_{D}\right)^{1.1}$, where *D* is the distance from the source in feet and D_{ref} is the reference distance of 25 feet. While construction noise levels increase based on the cumulative equipment in use simultaneously, construction vibration levels would be dependent on the location of individual pieces of equipment. That is, equipment scattered throughout the site would not generate a collective vibration level, but a vibratory roller, for instance, operating near the project site boundary would generate the worst-case vibration levels for the receptor sharing that property line. Further, construction vibration impacts are assessed based on the potential for damage to buildings on receiving land uses, not at receptors at the nearest property lines. Therefore, the distances used to propagate construction vibration levels (as shown in Table 9), which are different than the distances used to propagate construction noise levels (as shown in Table 7), were estimated under the assumption that each piece of equipment from Table 8 was operating along the nearest portion of the active construction site where the worst vibration-generating equipment would operate, which would represent the worst-case scenario.

TABLE 9 Vibration Source Levels for Construction Equipment

Equipment		PPV (in/sec) Estimated at Nearest Buildings Adjoining the Project Site		
		North Residences (65 ft)	West Residences (50 ft)	South Commercial (50 ft)
Clam shovel drop		0.071	0.094	0.094
Hydromill (slurry wall)	in soil	0.003	0.004	0.000
	in rock	0.006	0.008	0.001
Vibratory Roller		0.073	0.098	0.098
Hoe Ram		0.031	0.042	0.042
Large bulldozer		0.031	0.042	0.042
Caisson drilling		0.031	0.042	0.042
Loaded trucks		0.027	0.035	0.035
Jackhammer		0.012	0.016	0.016
Small bulldozer		0.001	0.001	0.001

Source: Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, Office of Planning and Environment, U.S. Department of Transportation, September 2018, as modified by Illingworth & Rodkin, Inc., November 2023.

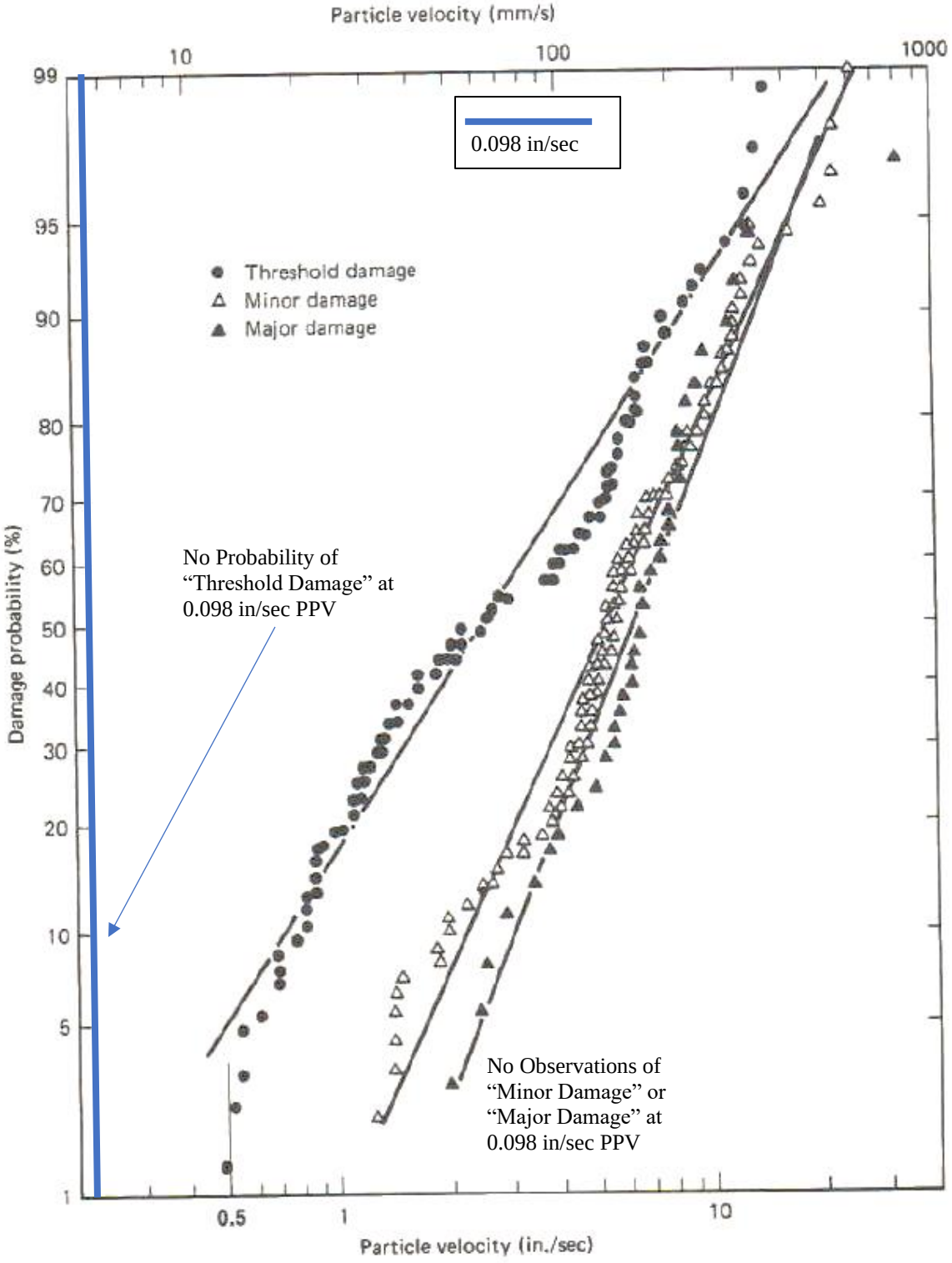
Construction activities at the project site would not exceed the 0.3 in/sec PPV threshold at buildings consisting of conventional materials surrounding the project site. A study completed by the US Bureau of Mines analyzed the effects of blast-induced vibration on buildings in USBM RI 8507.[1] The findings of this study have been applied to buildings affected by construction-generated vibrations.[2] As reported in USBM RI 8507[1] and reproduced by Dowding,[2] Figure 2 presents the damage probability, in terms of "threshold damage," "minor damage," and "major damage," at varying vibration levels. Threshold damage, which is described as cosmetic damage in this report, would entail hairline cracking in plaster, the opening of old cracks, the loosening of paint or the dislodging of loose objects. Minor damage would include hairline cracking in masonry or the loosening of plaster, and major structural damage would include wide cracking or shifting of foundation or bearing walls.

As shown in Figure 2, maximum vibration levels of 0.098 in/sec PPV or lower would not result in any chance of cosmetic damage. No cosmetic, minor or major damage would be expected at the conventional buildings immediately adjoining the project site. At these locations, and in other surrounding areas where vibration would not be expected to cause cosmetic damage, vibration levels may still be perceptible. However, as with any type of construction, this would be anticipated and would not be considered significant, given the intermittent and short duration of the phases that have the highest potential of producing vibration (use of jackhammers and other high-power tools). By use of administrative controls, such as notifying neighbors of scheduled construction activities, the effects of perceptible vibration can be minimized. Impacts due to temporary construction vibration would be considered **less-than-significant**.

[1] Siskind, D.E., M.S. Stagg, J.W. Kopp, and C.H. Dowding, Structure Response and Damage Produced by Ground Vibration form Surface Mine Blasting, RI 8507, Bureau of Mines Report of Investigations, U.S. Department of the Interior Bureau of Mines, Washington, D.C., 1980.

[2] Dowding, C.H., Construction Vibrations, Prentice Hall, Upper Saddle River, 1996.

FIGURE 2 Probability of Cracking and Fatigue from Repetitive Loading



Source: Dowding, C.H., Construction Vibrations, Prentice Hall, Upper Saddle River, 1996.