BIOLOGICAL RESOURCES REPORT

ATTACHMENT A

to the

Vallejo Mill Historical Park Pickleball Courts and Dog Park Project Initial Study / Mitigated Negative Declaration





Vallejo Mill Historical Park Site Development Plan Biological Resources Report

Project #4394-10

Prepared for:

Rico Lardizabal **City of Fremont** 39550 Liberty Street Fremont, CA 94538

Prepared by:

H. T. Harvey & Associates

March 3, 2024

Table of Contents

Section 1. Introduction	1
1.1 Project Location	1
1.2 Project Description	1
1.3 Municipal Code Requirements	5
Section 2. Methods	8
2.1 Background Review	8
2.2 Site Visit	8
Section 3. Regulatory Setting	9
3.1 Federal Regulations	9
3.1.1 Clean Water Act	9
3.1.2 Rivers and Harbors Act	.10
3.1.3 Federal Endangered Species Act	.10
3.1.4 Federal Migratory Bird Treaty Act	.11
3.2 State Regulations	.11
3.2.1 Porter-Cologne Water Quality Control Act	.11
3.2.2 California Endangered Species Act	.12
3.2.3 California Environmental Quality Act	.13
3.2.4 California Fish and Game Code	.14
3.2.5 State Water Resources Control Board Stormwater Regulation	.10
3.3.1 City of Fremont Tree Preservation Ordinance	.10
	. 10
Section 4. Environmental Setting	.18
4.1 General Project Area Description	.18
4.2 Biotic Habitats	.18
4.2.1 California Annual Grassland	.18
4.2.2 Kemnant Sycamore Woodland	.21
4.2.5 Coast Live Oak woodland	. 22
4.2.5 Developed	. 24
4.2.6 Seasonal Wetland	25
4.3 Wildlife Movement	.26
	20
5.1 Special Status Dent Species	.20
5.1 Special Status Animal Species	. 31
5.3 Sepsitive Natural Communities Vegetation Alliances and Habitats	43
5.3.1 Sensitive Natural Communities.	.43
5.3.2 Sensitive Vegetation Alliances	.44
5.3.3 CDFW Riparian Habitat	.44
5.3.4 Sensitive Habitats (Waters of the U.S./State)	.44
5.3.5 Nonnative and Invasive Species	.44
Section 6 Impacts and Mitigation Measures	45
6.1 Impacts on Special-Status Species	46
6.1.1 Impacts on Regionally Common Habitats and Associated Common Plant and Wildlife Species	0
(Less than Significant)	.46
6.1.2 Impacts on Water Quality and Special-Status Fish (Less than Significant)	.46
6.1.3 Impacts on Special-Status Plants (Less than Significant with Mitigation)	.47

6.1.4 Impacts on the Monarch Butterfly and Crotch's Bumble Bee (Less than Significant)	50
6.1.5 Impacts on the California Tiger Salamander and California Red-Legged Frog (Less than Signific	cant
with Mitigation)	51
6.1.6 Impacts on the Northwestern Pond Turtle (Less than Significant with Mitigation)	52
6.1.7 Impacts on the Burrowing Owl (Less than Significant)	53
6.1.8 Impacts on the Bald Eagle and Golden Eagle (Less than Significant)	54
6.1.9 Impacts on Nonbreeding Special-Status Birds and Mammals (Less than Significant)	55
6.1.10 Impacts on the Loggerhead Shrike, White-Tailed Kite, and Yellow Warbler (Less than	
Significant)	56
6.1.11 Impacts on Common and Special-Status Species of Roosting Bats (Less than Significant)	56
6.1.12 Impacts on Sensitive Wildlife due to Increased Lighting (Less than Significant with Mitigation)) 57
6.2 Impacts on Sensitive Communities	59
6.3 Impacts on Wetlands	59
6.4 Impacts on Wildlife Movement	60
6.4.1 Impacts on Wildlife Movement (Less than Significant)	60
6.4.2 Impacts on Nesting Birds (Less than Significant)	61
6.5 Impacts due to Conflicts with Local Policies:	61
6.5.1 Impacts Due to the Removal of Protected Trees (Less than Significant)	61
6.6 Impacts due to Conflicts with an Adopted Habitat Conservation Plan	62
6.7 Cumulative Impacts	62
Section 7. References	63

Figures

Figure 1.	Vicinity Map	2
Figure 2.	Project Site	3
Figure 3.	Biotic Habitats	19
Figure 4.	CNDDB-Mapped Records of Special-Status Plants	29
Figure 5.	CNDDB-Mapped Records of Special-Status Animals	30

Tables

Table 1.	Special-Status Plant Species, Their Status, and Potential for Occurrence on the Project Site 32
Table 2.	Special-Status Animal Species, Their Status, and Potential for Occurrence on the Project Site 34

Appendices

Appendix A.	Plants Observed	A-1
Appendix B.	Special-Status Plants Considered but Rejected for Occurrence	B-1

List of Preparers

Steve Rottenborn, Ph.D., Principal/Senior Wildlife Ecologist Robin Carle, M.S., Project Manager/Senior Wildlife Ecologist Vanessa Morales, B.S., Plant and Wetlands Ecologist Emily Malkauskas, B.S., Wildlife Ecologist This report describes the biological resources present in the area of proposed site improvements at the Vallejo Mill Historical Park in Fremont, California; the potential impacts of the proposed project on biological resources; and measures necessary to reduce project impacts to less-than-significant levels under the California Environmental Quality Act (CEQA). This assessment is based on the project maps and description provided to H. T. Harvey & Associated by the City of Fremont (City) through February 2024.

1.1 Project Location

The approximately 12.62-acre Fremont Mill Historical Park (hereafter referred to as the *project site*) is located at the intersection of Mission Boulevard and Niles Canyon Road in Fremont, California (Figures 1 and 2). The site is generally bounded by railway tracks and undeveloped ranchlands to the north and northwest, Niles Canyon Road to the east and southeast (with Alameda Creek present immediately south/southeast of Niles Canyon Road), and Mission Boulevard to the southeast (with residential housing present immediately southwest of Mission Boulevard). Surrounding areas consist of undeveloped open space to the northeast and northwest and residential development to the southeast and southwest. The project site is located on the *Niles, California* 7.5-minute United States Geological Survey (USGS) quadrangle.

1.2 Project Description

The Vallejo Mill Historical Park site was home to two former mills built by Don Jose de Jesus Vallejo in 1841 and 1853. In 1986, the City developed a Schematic Report for the park that included archeological investigations that were able to confirm the prior existence of these structures, although they are no longer visible except for remnants of the foundation of the 1841 structure. Along with the mill structure remnant, the existing park consists of a paved parking lot that is in fair to poor condition, unpaved paths, park furnishings and signage, trees, and grasslands. It is currently difficult to use this space for its intended park use with the current design.

On July 18, 2023, the Fremont City Council adopted a Site Development Plan (Plan) for the Vallejo Mill Historical Park. The proposed Plan includes the addition of a dog park in a natural setting with existing trees. The dog park will include bark mulch surfacing, 4-foot-tall fencing, and park user and maintenance access gates and entry areas.

The plan also includes four new pickleball courts with sports court lighting. An existing parking area will be replaced with four new pickleball courts, and new parking stalls are proposed in front of the dog park where they will be visible and accessible from the Niles Canyon Road frontage. New parking will include Americans with Disabilities Act-accessible stalls and provisions for a future electric vehicle charger. The existing park driveway and entrance will be maintained at the same location and will terminate at a new vehicle driveway roundabout that meets emergency vehicle requirements.



Figure 1. Vicinity Map Vallejo Mill Historical Park Site Development Plan Biological Resources Report (4394-10) March 2024

N:\Projects4300\4394-01\10\Reports\BRR\BRR.aprx

õ

H. T. HARVEY & ASSOCIATES

Ecological Consultants



Ĩ

H. T. HARVEY & ASSOCIATES

Ecological Consultants

Figure 2. Project Site Vallejo Mill Historical Park Site Development Plan Biological Resources Report (4394-10) March 2024

Additional park improvements under the Plan include perimeter concrete split-rail fencing and gates extending along the southeastern boundary of the site from the corner of Mission Boulevard and Niles Canyon Road northeast to where the extent of surface asphalt on the site ends to discourage vehicular access into the natural areas of the park. Other plan improvements include Americans with Disabilities Act-compliant walkways, new park furnishings including benches, trash and recycling receptacles, drinking fountains, park rules signage, and security and pathway lighting from the pickleball courts to the parking stalls. The Site Development Plan also includes the location for a vault toilet restroom.

The Plan identifies 2–3 existing small trees to be removed and replanted to facilitate the new design. These proposed tree removals will be mitigated with new tree planting. New trees to be planted on the site are native coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*), and nonnative eastern redbud (*Cercis canadensis*) and Japanese zelkova (*Zelkova serrata*). The remainder of the park site will remain undeveloped.

Construction activities will include the following:

- Tree removal, and installation of tree protection fencing around trees to be preserved
- Clearing and grubbing of existing vegetation
- Site grading and re-distribution of excess excavated soils on-site at a designated location
- Partial demolition and removal of the existing driveway and parking lot asphalt surfacing, installation of slurry over existing asphalt to remain, and installation of an asphalt driveway and parking lot with striping
- Pedestrian concrete paving, stabilized decomposed granite paving, and installation of 12-inch wide and 6inch wide concrete curbs
- Installation of a mulched area and new trees with soil amendments, and modifications to the existing irrigation system to support the additional planting areas
- Installation of asphalt plexipave-surfaced pickleball courts with 7-foot high and 4-foot high chain-link fencing and gates
- Installation of electrical improvements to provide service to parking lot and park safety lighting and court lighting
- Installation of site furnishings including benches, bike racks, drinking fountains, and trash and recycle receptacles
- Installation of 4-foot tall fencing around small and large dog parks, including dog gates
- Installation of perimeter split-rail fencing

1.3 Municipal Code Requirements

The project will comply with standard development requirements related to biological resources and specialstatus species provided in Section 18.218.050(b) of the City's Municipal Code, as follows:

- (1) Burrowing Owl. New development projects with the potential to impact burrowing owl habitat through grading, demolition, and/or new construction shall implement the following measures prior to grading or ground disturbing activities:
 - (A) Preconstruction Surveys. Preconstruction surveys for burrowing owls shall be conducted prior to the initiation of all project activities within potential burrowing owl nesting and roosting habitat (i.e., agricultural habitat with burrows of California ground squirrels) to determine if suitable burrowing owl habitat is present. Surveys shall be conducted by a qualified biologist in conformance with the most recent requirements and guidelines of the California Department of Fish and Wildlife (CDFW). The biologist shall determine the number and time frame (prior to construction) of surveys to be conducted.
 - (B) Implement Buffer Zones. Areas currently occupied by burrowing owls shall be avoided for the duration of residing on site and/or the nesting period (February 1st through August 31st). The biologist will recommend a suitable buffer zone distance for avoidance of nesting or roosting habitat.
 - (C) Passive Relocation. If burrowing owls cannot be avoided by the proposed project, then additional measures, such as passive relocation during the nonbreeding season, may be utilized to reduce any potential impacts. Measures for successful relocation shall be recommended by a qualified biologist in conformance with CDFW requirements and guidelines.
 - (D) Initiation of Construction Activities. When a qualified biologist is able to determine that burrowing owls are no longer occupying the site and passive relocation is deemed successful, construction activities may continue. The applicant shall submit the determination of the biologist to the planning manager for authorization to continue.
- (2) Nesting Birds. New development projects with the potential to impact nesting birds through tree or shrub removal shall implement the following measures prior to removal of any trees/shrubs, grading, or ground disturbing activities:
 - (A) Avoidance. Proposed projects shall avoid construction activities during the bird nesting season (February 1st through August 31st).
 - (B) Preconstruction Surveys. If construction activities are scheduled during the nesting season, a qualified biologist shall conduct a preconstruction survey to identify any potential nesting activity. The biologist shall determine the number and time frame (prior to construction) of surveys to be conducted.

- (C) Protective Buffer Zone(s). If the survey indicates the presence of nesting birds, protective buffer zones shall be established around the nests. The size of the buffer zone shall be recommended by the biologist in consultation with the CDFW depending on the species of nesting bird and level of potential disturbance.
- (D) Initiation of Construction Activities. The buffer zones shall remain in place until the young have fledged and are foraging independently. A qualified biologist shall monitor the nests closely until it is determined the nests are no longer active, at which time construction activities may commence within the buffer area.
- (3) Roosting Bats. New development with potential to impact special-status or roosting bat species through demolition of existing structures or removal of trees on site shall conduct the following measures prior to demolition:
 - (A) Preconstruction Surveys. A qualified biologist shall conduct a preconstruction survey during seasonal periods of bat activity (mid-February through mid-October) to determine suitability of structure(s) or trees as bat roost habitat.
 - (B) Protective Buffer Zone(s). If active bat roosts are found on site, a suitable buffer from construction shall be established per the biologist. The biologist shall determine the species of bats present and the type of roost.
 - (C) Mitigation and Exclusion. If the bats are identified as common species, and the roost is not being used as a maternity roost or hibernation site, the bats may be evicted using methods developed by a qualified biologist. If special-status bat species are found present, or if the roost is determined to be a maternity roost or hibernation site for any species, then the qualified biologist shall develop a bat mitigation and exclusion plan to compensate for lost roost. The site shall not be disturbed until CDFW approves the mitigation plan.
- (4) California Tiger Salamander. New development projects with the potential to impact California tiger salamander habitat through grading, demolition, and/or new construction shall implement the following measures prior to any grubbing, grading, or ground disturbing activities:
 - (A) Exclusion fencing shall be installed around the perimeter of the two fields¹ to deter tiger salamanders from accessing the fields. The fencing should be regularly maintained, especially during the rainy season when salamanders could traverse onto the fields.
 - (B) A qualified biologist shall conduct preconstruction surveys prior to grubbing and grading activities within the two fields. The biologist shall determine the number and time frame (prior to construction) of surveys to be conducted.

¹ The language regarding "two fields" is verbatim from the City's Municipal Code. For the purpose of this report, and per communications with the City, we have assumed that this measure applies to the project (i.e., fencing will be installed around the project site, and a qualified biologist shall conduct preconstruction surveys prior to grubbing and grading activities on the project site).

(C) A qualified biologist shall monitor initial grubbing and grading activities to ensure no California tiger salamanders are present.

2.1 Background Review

Prior to conducting field work, H. T. Harvey & Associates ecologists reviewed the project description and maps provided by the City of Fremont; previous technical reports prepared for the project site and surrounding areas (including the *Bay Area Ridge Trail – Fremont to Garin Biological Resources Assessment* [LSA 2018]); aerial images (Google Inc. 2024); a USGS topographic map; a National Wetlands Inventory map (2024); National Resources Conservation Service (NRCS) soil survey maps (2024); the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB) (2024); and other relevant reports, scientific literature, and technical databases. For the purposes of this report, the *project vicinity* is defined as the area within a 5-mile radius surrounding the project site.

In addition, for plants, we reviewed all species on current California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1A, 1B, 2A, 2B, 3, and 4 lists (CNPS 2024) occurring in the project region, which is defined as the *Niles, California* USGS 7.5-minute quadrangle and surrounding eight quadrangles (*Hayward, Dublin, Livermore, Newark, La Costa Valley, Mountain View, Milpitas*, and *Calaveras Reservoir*). In addition, we queried the CNDDB (2024) for natural communities of special concern that occur on the project site, and we perused records of birds reported in nearby areas, such along Alameda Creek and at Niels Community Park, on eBird (Cornell Lab of Ornithology 2024) and on the East-Bay-Birding Sightings List Serve (2024).

2.2 Site Visit

H. T. Harvey & Associates plant and wetland ecologist Vanessa Morales, B.S., and wildlife ecologist Emily Malkauskas, B.S., conducted a reconnaissance-level survey of the project site on January 25, 2024. The purpose of the survey was to provide an impact assessment specific to the proposed construction of the project, as described above. Specifically, surveys were conducted to (1) assess existing biotic habitats and plant and animal communities on the project site, (2) assess the project site for its potential to support special-status species and their habitats, and (3) identify potential jurisdictional and sensitive habitats, such as waters of the U.S./state and riparian habitat. E. Malkauskas also conducted focused surveys for suitable habitat for roosting bats in trees on the site, existing nests of raptors (e.g., hawks, owls and falcons), nests of the San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), and suitable nesting and roosting habitat for burrowing owls (*Athene cunicularia*) (i.e., burrows of California ground squirrels [*Otospermophilus beecheyi*]).

Biological resources on the project site 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, U.S. Army Corps of Engineers (USACE) jurisdiction extends to the ordinary high water (OHW) 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 OHW mark to the outer edges of the wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, may be subject to USACE jurisdiction. 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." If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHW mark or high tide line to the outer edges of the wetlands. A May 25, 2023 U.S. Supreme Court decision in Sackett v. Environmental Protection Agency limited the definition of jurisdictional wetlands and other waters that are considered waters of the U.S. to those wetlands and other waters having a continuous surface connection with traditional navigable waters or their relatively permanent tributaries.

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 Regional Water Quality Control Boards [RWQCBs]) charged with implementing water quality certification in California.

<u>Project Applicability</u>: Two seasonal wetlands are present on the project site; however, these wetlands are not expected to be considered jurisdictional waters of the U.S. under the CWA because they are isolated from (i.e., they lack a continuous surface connection with) traditional navigable waters and their relatively permanent tributaries. Further, the project will not directly impact these wetlands. The proposed project will therefore not impact jurisdictional wetlands under the CWA.

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.

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.

<u>Project Applicability</u>: No current or historical Section 10 Waters are present on or close to the project site. Therefore, a Letter of Permission from the USACE is not 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 U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service 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 suitable habitat for any federally listed plant species is present on the project site.

There is a very low potential for the federally threatened California red-legged frog (*Rana draytonii*) and California tiger salamander (*Ambystoma californiense*) to occur on the project site as scarce and infrequent dispersants or foragers, and project activities may impact these species if individuals are present. The monarch butterfly (*Danaus plexippus*), a candidate for listing under FESA, and the northwestern pond turtle (*Actinemys marmorata*), federally proposed as threatened, may also occur on the project site, and there is some potential for the project to result in impacts on these species if they are present. No additional federally listed, proposed, or candidate animal species occur or potentially occur on the project site.

3.1.4 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.

<u>Project Applicability</u>: With the exception of the California quail (*Callipepla californica*), which is in a family excluded from coverage under the MBTA, all native bird species that occur on the project site are protected under the MBTA.

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, as well as areas requiring permit authorization from the RWQCBs to impact.

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 Water Quality Certification even if the area occurs outside of USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements even if the USACE does not. Under the 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.

<u>Project Applicability</u>: The two seasonal wetlands identified on the project site are expected to be regulated by the RWQCB as waters of the state. However, no direct impacts on these seasonal wetlands are proposed; thus, a Section 401 permit or Waste Discharge Requirement from the RWQCB would not be required.

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 suitable habitat is present on the project site for any state-listed plant species.

There is a very low potential for the California tiger salamander, which is state listed as threatened, to occur on the project site as a scarce and infrequent transient or dispersant, and this species could be affected by the project if it is present. The state candidate Crotch's bumble bee (*Bombus crotchii*) may also occur on the project site in small numbers as a forager, and nesting could possibly occur where suitable burrows are present. The state endangered bald eagle (*Haliaeetus leucocephalus*) may be found in the project vicinity as a forager where there is open water supporting fish and/or waterfowl (e.g., along Alameda Creek), and it could potentially nest nearby where suitable large trees are present, although suitable nesting habitat is absent from the site itself. The

mountain lion (*Puma concolor*), a candidate for listing under CESA, and the state-threatened tricolored blackbird (*Agelaius tricolor*) may occur on the site occasionally as nonbreeders, but no impacts to individuals of these species will result from the project.

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 refrain from approving projects with significant environmental effects if there are feasible 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 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 the CEQA 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 (CNPS 2024). 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).

<u>Project Applicability</u>: 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.

<u>Project Applicability</u>: No riparian habitat regulated by the CDFW occurs on the project site. Although an area of remnant sycamore woodland habitat that was historically associated with Alameda Creek is present on the site, no wetland hydrology is associated with this habitat, and therefore it is not considered "riparian habitat" that is regulated by the CDFW. Therefore, a CDFW LSAA would not be required for the project.

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 best management practices (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 Alameda 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, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors.

<u>Project Applicability</u>. The project will comply with the requirements of the NPDES Statewide Storm Water Permit and Statewide General Construction Permit. Therefore, construction-phase activities would not result in detrimental water quality effects on biological or regulated resources.

3.3 Local Regulations

3.3.1 City of Fremont Tree Preservation Ordinance

The City of Fremont Tree Preservation Ordinance (Chapter 18.215 of the City Municipal Code) serves to protect all trees on private property, as well as City-designated landmark trees, from removal, damage, or relocation. A permit or authorization is required to remove all designated landmark trees, as well as private trees that meet one or more of the following requirements:

1. A tree having a diameter at breast height (DBH) of 6 inches or greater and located on a vacant or underdeveloped lot;

- 2. A tree having a DBH of 6 inches or greater and located on a developed lot that is the subject of a contemplated or pending application for a development project;
- 3. A native tree (defined as oak [Quercus spp.], coast redwood [Sequoia sempervirens], California buckeye [Aesculus californica], Pacific madrone [Arbutus menziesii], western sycamore [Platanus racemosa], bigleaf maple [Acer macrophyllum], western redbud [Cercis occidentalis], and California bay [Umbellularia californica]) or tree of exceptional adaptability to the Fremont area (defined as including, but not limited to, Fremont cottonwood [Populus fremontii], Peruvian pepper [Schinus molle], European olive [Olea europea], black walnut [Juglans nigra], and deodar cedar [Cedrus deodard]) having a DBH of 10 inches or greater;
- 4. A tree having a DBH of 18 inches or greater;
- 5. A tree that was required by the City to be planted or retained as mitigation for the removal of a tree;
- 6. A tree planted or retained as a condition of any City-conferred development project approval, including approvals conferred prior to adoption of this chapter; or
- 7. One of six or more trees of the same species that are located on the same lot, and that each are 6 inches DBR or greater.

Exemptions to these requirements are provided for trees on undeveloped lots less meeting certain square footage and zoning conditions, container trees, fruit or nut trees of species grown for commercial food production (with the exception of black walnut and European olive, listed above), emergency circumstances, and trees that need to be removed or damaged to for building or maintaining public utilities.

<u>Project Applicability</u>: Protected trees are present on the project site, and several protected trees will be removed by the City to support the project. The City will comply with all tree replacement guidelines and policies for any trees that need to be removed or trimmed.

4.1 General Project Area Description

The project site is located in the City of Fremont in Alameda County, California (Figure 1). The climate in the project vicinity is coastal Mediterranean, with most rain falling in the winter and spring. Mild cool temperatures are common in the winter, and hot to mild temperatures are common in the summer. Climate conditions in the vicinity include a 30-year average of 19.5 inches of annual precipitation with a monthly average temperature range from 49.1°F to 70.3°F (PRISM Climate Group 2024). Elevations on the project site range from 75–109 feet above mean sea level (Google Inc. 2024). The NRCS has mapped two soil units on the project site: Los Osos silty clay loam, 7–30% slopes, and Riverwash, 0–2% slopes (NRCS 2024). Los Osos silty clay loam is a well-drained soil found on hills that is derived from several parent material sources upslope of the project site. Riverwash is an excessively drained soil derived from channels with variable soil profiles.

4.2 Biotic Habitats

The reconnaissance-level survey identified five biotic habitats on the project site: California annual grassland, remnant sycamore woodland, coast live oak woodland, ornamental woodland, developed/landscaped, and seasonal wetland (Figure 3). These biotic habitats are described in detail below. Plant species observed during the reconnaissance-level survey are listed in Appendix A.

4.2.1 California Annual Grassland

Vegetation. California annual grassland habitat (7.97 acres) on the project site is dominated by nonnative annual grasses such as ripgut brome (*Bromus diandrus*), annual bluegrass (*Poa annua*), and wild oats (*Avena* sp.) (Photo 1) (Figure 3). Other species present within this habitat include nonnative forbs such as field mustard (*Brassica rapa*), cheeseweed (*Malva parviflora*), Bermuda buttercup (*Oxalis pes-capre*), milk thistle (*Silybum marinum*) and long-beaked filaree (*Erodium botrys*). Nonnative trees are scattered throughout this grassland; these include blue gum eucalyptus (*Eucalyptus globulus*), golden rain tree (*Koelreuteria paniculata*), and Peruvian pepper.



Photo 1. California annual grassland habitat on the project site.

Vallejo Mill Historical Park / Survey Area (12.62 acres)
Project Impacts
Permanent (2.28 acres)
Temporary (0.82 acre)
Biotic Habitats
California Annual Grassland (7.97 acres)
Remnant Sycamore Woodland (1.77 acres)
Coast Live Oak Woodland (1.30 acres)
Ornamental Woodland (0.95 acre)
Developed (0.57 acre)
Seasonal Wetland (0.05 acre)





Feet

Ecological Consultants



Figure 3. Biotic Habitats Vallejo Mill Historical Park Site Development Plan Biological Resources Report (4394-10) March 2024 **Wildlife.** Wildlife use of the California annual grassland habitat on the project site is limited due to human disturbances (e.g., mowing, public use of the park, and adjacent vehicle traffic) as well as the limited extent of the grassland area on the site. More extensive grasslands are located immediately north of the site and provide higher-quality habitat for grassland-associated wildlife, such as the grasshopper sparrow (*Ammodramus savannarum*). Thus, while grassland-associated bird species are not expected to breed on the project site, they are expected to breed in the adjacent grasslands to the north and could occur on the site as occasional foragers.

A number of resident bird species, including common species and species associated with adjacent woodland habitats, will forage in the grassland habitat on the site. These include the native resident California towhee (*Melozone crissalis*), mourning dove (*Zenaida macroura*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), and American crow (*Corvus brachyrhynchos*). Ground-nesting birds, such as the dark-eyed junco and mourning dove, may also nest in this habitat. Several species of migrating and wintering birds may forage in the grassland habitat on the site during the nonbreeding season. These include the white-crowned sparrow (*Zonotrichia leucophrys*) and golden-crowned sparrow (*Zonotrichia atricapilla*), which forage on the ground or in herbaceous vegetation, as well as the yellow-rumped warbler (*Setophaga coronata*), which forages in trees and shrubs. The nonnative trees present within the grassland habitat on the site provide suitable nesting habitat for several bird species, including the Anna's hummingbird (*Calypte anna*) and bushtit (*Psaltriparus minimus*). These trees also provide suitable nesting habitat for raptors such as the red-shouldered hawk (*Buteo lineatus*); however, raptors are more likely to nest in surrounding natural areas that are subject to lower levels of human disturbance compared to the project site. No old, inactive raptor nests were observed on the site during the January 2024 survey, suggesting that raptors have not nested on the site in recent years.

The limited extent of grassland vegetation on the site, as well as disturbance from regular mowing, limit the availability of food resources for common species of mammals that occur in grassland habitats. Nevertheless, burrows of native California ground squirrels are present in this habitat. These mammals are an important component of grassland communities, providing a prey base for diurnal raptors and terrestrial predators. Other rodent species that can potentially occur in the grassland habitat on the site include the native California vole (*Microtus californicus*) and deer mouse (*Peromyscus maniculatus*). Diurnal raptors such as red-tailed hawks and red-shouldered hawks forage for these small mammals over grasslands during the day, and at night nocturnal raptors, such as barn owls (*Tyto alba*), will forage for nocturnal rodents, such as deer mice.

Other mammals such as the native striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and coyote (*Canis latrans*), as well as the nonnative Virginia opossum (*Didelphis virginiana*), will use the grassland habitat on the project site for foraging. Several reptile species also occur regularly in grassland habitats, including the western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis catenifer*), and southern alligator lizard (*Elgaria multicarinata*).

4.2.2 Remnant Sycamore Woodland

Vegetation. Remnant sycamore woodland habitat (1.77 acres) occurs in the central portion of the project site (Photo 2) (Figure 3). This woodland was historically associated with Alameda Creek, but the development of Niles Canyon Road separated this woodland from the creek, and there is no longer any hydrological input associated with this area. Due to the lack of hydrological input, this habitat is considered a "remnant" woodland, rather than true riparian habitat or a sensitive sycamore alluvial woodland natural community.



Photo 2. Remnant sycamore woodland habitat on the project site.

The overstory vegetation in the remnant sycamore

woodland habitat on the project site consists entirely of native western sycamores. No midstory trees or shrubs are present in this habitat. Common herbaceous understory species include nonnative dwarf nettle (*Urtica urens*), English ivy (*Hedera helix*), and annual bluegrass (*Poa annua*), as well as native California figwort (*Scrophularia californica*). Abundant leaf duff is present in the understory as well. The topography surrounding this remnant woodland is mainly flat with some areas having gradual north-facing slopes.

Wildlife. The remnant sycamore woodland habitat on the project site provides high-quality habitat for a number of animal species due to the presence of numerous mature sycamore trees. However, this habitat does not support midstory vegetation characteristic of typical sycamore alluvial woodland habitats (i.e., habitats with associated wetland hydrology); instead, the understory vegetation consists of parkland areas with mown ground vegetation with no shrubs or small trees to provide dense cover and foraging opportunities. Human disturbance associated with the park also limits the quality of this habitat for wildlife. Therefore, the habitat on the project site is of lower quality for native animal species compared to non-remnant sycamore alluvial woodland habitats in the region.

Native sycamore trees provide high-quality nesting and foraging resources for birds, and the sycamore trees on the project site support relatively high densities of many native birds. These include cavity-nesting birds such as the chestnut-backed chickadee (*Poecile rufescens*), oak titmouse (*Baeolophus inornatus*), and American kestrel (*Falco sparverius*), as well as various species of woodpeckers. Additional resident birds likely to use these trees for nesting and foraging include the mourning dove, northern mockingbird (*Mimus polyglottos*), American robin (*Turdus migratorius*), and lesser goldfinch (*Spinus psaltria*). During spring and fall migration, migrant songbirds such as the cedar waxwing (*Bombycilla cedrorum*), yellow-rumped warbler, orange-crowned warbler (*Leiothlypis celata*), and others will forage in these trees. These sycamore trees also provide suitable nesting habitat for raptors such as red-tailed hawks and red-shouldered hawks; however, raptors are more likely to nest in other large trees in the surrounding vicinity that are subject to lower levels of human disturbance compared to the trees on the project site. No old, inactive raptor nests were observed on the site during the January 2024 survey, suggesting

that raptors have not nested on the site in recent years. However, raptors will perch in these trees and forage for prey in the understory and in adjacent grasslands.

Several species of reptiles and amphibians occur in this habitat. Leaf litter, downed tree branches, and fallen logs provide cover for the arboreal salamander (*Aneides lugubris*), California slender salamander (*Batrachoseps attenusatus*), western toad (*Anaxyrus boreas*), and Pacific treefrog (*Pseudacris regilla*). Several lizards may also occur here, including the western fence lizard, western skink (*Eumeces skiltonianus*), and southern alligator lizard. Small mammals, such as the ornate shrew (*Sorex ornatus*) and California vole (*Microtus californicus*) occur in this habitat as well. Medium-sized mammals, such as the raccoon and striped skunk, also use this habitat.

Bats such as the Yuma myotis (*Myotis yumanensis*), California myotis (*Myotis californicus*), big brown bat (*Eptesicus fuscus*), and Mexican free-tailed bat (*Tadarida brasiliensis*) will roost in sycamore trees, and several cavities that could support maternity colonies or large colonies of these and other local bat species were observed in the remnant sycamore woodland habitat on the project site.

4.2.3 Coast Live Oak Woodland

Vegetation. Approximately 1.30 acres of coast live oak woodland habitat is present in patches throughout the project site. The overstory of this habitat is dominated by coast live oaks, with sparse California bays also present. Shrubs such as nonnative French broom (*Genista monspessulana*) and privet (*Ligustrum* sp.) as well as native coyote brush (*Baccharis pilularis*) are present in the midstory. Growing in the understory are nonnative perennial Harding grass (*Phalaris aquatica*), California blackberry (*Rubus ursinus*), and Italian thistle (*Carduus pycnocephalus*). Other plant species found in this habitat in low numbers include native toyon (*Heteromeles arbutifolia*) and poison oak (*Toxicodendron*



Photo 3. Coast live oak woodland habitat on the project site.

diversilobum) as well as nonnative firethorn (*Pyracantha* sp.) and cotoneaster (*Cotoneaster* sp.). The ground cover in this habitat is mainly composed of leaf duff.

Wildlife. Woodlands dominated by oaks typically support diverse animal communities in California. Coast live oaks provide cavities, bark crevices, and complex branching growth that create shelter for wildlife species, and these trees produce mast crops that are an important food source for many birds and mammals. However, the patches of coast live oak woodland on the project site are limited in extent, with limited structural diversity in the understory, which limits the quality of this habitat for wildlife. Human disturbance associated with use of the park limits the quality of this habitat. However, these woodlands are located on the periphery of large natural areas, consisting of grasslands adjacent to the site and larger oak woodlands farther to the north and northeast. Therefore, although the oak woodlands on the project site do not provide high-quality habitat for

oak-associated wildlife, or extensive habitat to support large numbers of species, nearby natural areas provide source populations of oak-associated wildlife species, as well as abundant foraging resources, that increase the quality of the oak woodland habitat on the site for wildlife (e.g., compared to similar patches of oak woodlands in the region that are more isolated from natural areas). Due to these combined factors, a variety of wildlife species, including oak-associated species, are expected to use the oak woodland habitat on the project site.

Trees and shrubs in the oak woodland habitat on the site provide nesting habitat for resident birds, including cavity-nesting birds such as the Bewick's wren (*Thryomanes bewickii*), chestnut-backed chickadee, and oak titmouse, as well as various species of woodpeckers. Additional resident birds likely to use this habitat for nesting and foraging include the Anna's hummingbird, bushtit, California scrub-jay (*Aphelocoma californica*), and Steller's jay (*Cyanocitta stelleri*). During spring and fall migration, migrant songbirds such as those listed under *Remnant Sycamore Woodland* above will forage in these trees. In addition, because coast live oak trees are evergreen, they provide high-quality foraging habitat for many species of wintering birds including the ruby-crowned kinglet (*Regulus calendula*), yellow-rumped warbler, and Townsend's warbler (*Setophaga townsendi*). As discussed for western sycamore trees above, the oak trees on the site provide suitable nesting habitat for several species of raptors; however, raptors are more likely to nest in other large trees in the surrounding vicinity that are subject to lower levels of human disturbance compared to the trees on the project site. No old, inactive raptor nests were observed on the site during the January 2024 survey, suggesting that raptors have not nested on the site in recent years. However, raptors will perch in these trees and forage for prey in the understory and in adjacent grasslands.

Many of the amphibian, reptile, and mammal species discussed under *Remnant Sycamore Woodland* above will similarly use habitat features in coast live oak woodland habitat on the project site. In addition, mast crops produced by oak trees provide attractive foraging opportunities for a number of mammal species such as native black-tailed deer (*Odocoileus hemionus*) and raccoons, as well as nonnative fox squirrels (*Sciurus niger*) and Virginia opossums. However, only small crevices supporting suitable roosting habitat for individual bats was observed in this habitat; large cavities or otherwise high-quality roosting habitat that could support maternity colonies or large colonies of roosting bats were not detected.

4.2.4 Ornamental Woodland

Vegetation. The northeastern portion of the project site, as well as a small island in the existing parking area, support 0.95 acre of ornamental woodland habitat (Photo 4) (Figure 3). This woodland is composed of nonnative golden rain trees, tree of heaven (*Ailanthus altissima*), and Peruvian pepper trees, except within the parking area where a planted native California bay is present. The understory of the ornamental woodland habitat on the site primarily consists of California annual grassland habitat (described in Section 4.2.1 above). Some additional understory species that occur here include wild radish (*Raphanus sativa*) and English ivy.



Photo 4. Ornamental woodland habitat in the northeastern portion of the project site.

Wildlife. Because the ornamental woodland habitat on the project site is dominated by nonnative trees, it provides lower-quality resources for native wildlife compared to the remnant sycamore woodland and coast live oak woodland habitats discussed above. Wildlife use of the ornamental woodland habitat on the project site is also limited by human disturbance, the limited extent of the habitat, and the low structural diversity of the vegetation present. Nevertheless, wildlife species that occur in the surrounding woodland, grassland, and developed habitats are expected to make use of these areas. Bird species that are expected to nest and forage in these woodlands include the house finch (*Haemorhous mexicanus*), lesser goldfinch, Anna's hummingbird, mourning dove, and northern mockingbird. Common bird species associated with oak woodlands, such as the oak titmouse and chestnut-backed chickadee, are also expected to nest in this habitat due to the lack of suitably large trees; however, they will perch in ornamental trees and forage for prey in the understory and in adjacent grasslands.

Common mammals such as the native striped skunk and nonnative Virginia opossum will forage on fruit and seeds in the ornamental woodland habitat on the site, and nonnative fox squirrels will also nest and forage these trees. Small mammals and reptiles found in adjacent grassland habitat, including the deer mouse, western fence lizard, and gopher snake, will forage in ornamental woodland habitat. No cavities or crevices were observed in the trees within this habitat to provide high-quality roosting habitat for bats.

4.2.5 Developed

Vegetation. A 0.57-acre developed area is located adjacent to Niles Canyon Road along the southeastern boundary of the project site (Photo 5) (Figure 3). This area consists of a paved driveway and parking area, with old storage containers and trash present in the parking area. This area contains asphalt, with some areas of bare

dirt that support a few scattered individuals of nonnative cheeseweed, black nightshade (*Solanum nigrum*), and wild radish. No woody vegetation is present.

Wildlife. The developed area on the project site serves as wildlife habitat only in a very limited capacity due to the limited vegetation present to provide cover and foraging opportunities for wildlife, as well as the lack of structural features such as buildings that could provide nesting and roosting sites for birds and bats. Common wildlife species that use the paved developed areas on the site are associated with adjacent grasslands and woodlands, and are expected use these areas only



Photo 5. Developed habitat on the project site, with coast live oak woodland in the background.

opportunistically for movement and foraging, rather than as their primary habitat. These include the native western fence lizard and gopher snake, which may bask on paved areas, as well as common species of birds and mammals that may forage for fallen acorns and other seeds on the ground, or cross the developed area when traveling in between adjacent habitats.

4.2.6 Seasonal Wetland

Vegetation. Seasonal wetlands typically occur in shallow depressions with poorly drained soils, and they contain shallowly ponded water or saturated surface soils only during the wet season. During the January 2024 site visit, which followed a rain event, ponded water was observed in two seasonal wetlands (0.05 acre) in shallow depressions on the project site (Photo 6) (Figure 3). Dominant plant species within these seasonal wetlands include nonnative curly dock (Rumex crispus) and hyssop-leaf loosestrife (Lythrum hyssopifolium). The boundary of the seasonal wetlands was clear in the field. The southernmost wetland is located adjacent to a culvert at a low point on the site,



Photo 6. Seasonal wetland habitat on the project site.

while the northernmost wetland is located downslope of the railroad tracks in an area where an irrigation device was previously broken.

Wildlife. Due to their small size, isolation, and the limited extent of pooled water present, the seasonal wetlands on the project site support fairly low wildlife diversity, and do not support wetland-associated wildlife species. These wetlands do not pond water for sufficient periods to provide suitable breeding habitat for amphibians such as the native Pacific treefrog and western toad. However, those amphibian species could potentially take refuge or forage opportunistically in this habitat when dispersing from waterbodies providing longer hydroperiods (e.g., along Alameda Creek to the south and in ponds located in the hills to the north). Bird species that occur in surrounding grassland and woodland areas may forage in this habitat; however, birds associated with wetlands that support dense marsh vegetation, such as the song sparrow (*Melospiza melodia*), common yellowthroat (*Geothlypis trichas*), and marsh wren (*Cistothorus palustris*), are absent from these wetlands. Standing water in this habitat may also provide a source of drinking water for a variety of wildlife species.

4.3 Wildlife Movement

Wildlife movement within and in the vicinity of Vallejo Mill Historical Park 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 presence of development immediately southwest and southeast of the site, there are currently no well-defined or important movement corridors for mammals, amphibians, or reptiles on or through the project site. Wildlife species may move through the area using cover and refugia as they find them available. Extensive open grassland and oak woodland habitats to the northwest and northeast, which connect to the Diablo Range, provide connectivity between regional natural areas for many common and special-status species of birds, fish, mammals, reptiles, and amphibians. Specifically, migratory passerines, black-tailed deer, snakes, coyotes, striped skunks, rabbits, bobcats (*Lynx rufus*), tule elk (*Cervus canadensis*), and American badgers (*Taxidea taxus*), amongst other species, are expected to move through these habitats north of the project site. Because the project site is located on the periphery of these areas, some of these wildlife species may occasionally occur on the site itself. However, the site does not provide connectivity between important habitats in the region, and thus does not represent key habitat supporting wildlife movement through the region.

The project site is situated in a location where relatively natural habitats on the eastern edge of Fremont meet Alameda Creek. Although dense development east of Alameda Creek would prevent the site from being part of a true movement corridor, many animals likely cross the project site when traveling in between the creek and natural lands to the northwest and northeast. These animals would use Alameda Creek as a movement corridor to reach habitats located upstream and downstream.

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.
- Listed 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).

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 plant species in the general vicinity of the project site and Figure 5 depicts CNDDB records of special-status animal species. These generalized maps show areas where special-status species are known to occur or have occurred historically.



Ecological Consultants

Vallejo Mill Historical Park Site Development Plan Biological Resources Report (4394-10) March 2024



H. T. HARVEY & ASSOCIATES

Ecological Consultants

Vallejo Mill Historical Park Site Development Plan Biological Resources Report (4394-10) March 2024

5.1 Special-Status Plant Species

The CNPS (2024) and CNDDB (2024) identify 51 special-status plant species as potentially occurring in at least one of the nine USGS 7.5-minute quadrangles containing or surrounding the project site (for CNPS) or within the project vicinity (for CNDDB) (Appendix B). Of the 51 potentially occurring special-status plant species, 45 were determined to be absent from the project site for at least one of the following reasons: (1) absence of suitable habitat types, (2) lack of specific microhabitat or edaphic requirements, (3) the elevation range of the species is outside of the range of the project site, and/or (4) the project site is outside the species' known geographic range and/or there are no nearby extant records (Appendix B).

Suitable habitat, edaphic requirements, and elevation range are present on the project site for six special-status plant species: Hall's bush-mallow (*Malacothamnus hallii*), saline clover (*Trifolium hydrophilum*), Mt. Diablo helianthella (*Helianthella castanea*), Hospital Canyon larkspur (*Delphinium californicum* ssp. *interius*), caper-fruited tropidocarpum (*Tropidocarpum capparideum*), and bent-flowered fiddleneck (*Amsinckia lunaris*). Five of these potentially occurring special-status plants are not detectable in January, and we were therefore unable to survey for them during our site visit. All of these species are addressed in greater detail in Table 1 below.

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 surrounding region are presented in Table 2. Most of the special-status species listed in Table 2 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. Table 2 includes species that H. T. Harvey considers to potentially occur in the region, as well as some additional species that were considered for a nearby project (the *Bay Area Ridge Trail – Fremont to Garin Biological Resources Assessment* [LSA 2018]).

The following special-status species that are present in less urbanized settings in the East Bay or in specialized habitats in the East Bay, that occurred in the East Bay historically but are no longer present, or that were considered in the Bay Area Ridge Trail – Fremont to Garin Biological Resources Assessment (LSA 2018), bur are absent from the project site due to a lack of suitable habitat and/or isolation of the site from populations by urbanization: the vernal pool tadpole shrimp (Lepidurus packardi), vernal pool fairy shrimp (Branchinecta lynchi), conservancy fairy shrimp (Branchinecta conservatio), Bay checkerspot butterfly (Euphydryas editha bayensis), San Bruno elfin butterfly (Callophrys mossii bayensis), western bumble bee (Bombus occidentalis), foothill yellow-legged frog (Rana boylii), and San Joaquin kit fox (Vulpes macrotis mutica).

Several special-status species associated with tidal marsh, salt panne, or open-water habitats of the San Francisco Bay are known to occur in western Fremont along the San Francisco Bay, but are absent from the project site, which is separated from San Francisco Bay habitats by more than 5 miles of dense urban development and does not support suitable habitat for these species. These include the California Ridgway's rail (*Rallus obsoletus*

Name	*Status	Habitat and Blooming Period	Potential for Occurrence on the Project Site
CNPS-Listed Plant Species			
Hall's bush-mallow (Malocothamnus hallii)	CRPR 1B.2	Chaparral and cismontane woodland, sometimes on gravelly alluvial soils, or in any shrub or tree woodland that has recently burned (detectable year-round)	Absent. Suitable cismontane woodland habitat with alluvial soils to support this species is present on the project site. Hall's bush-mallow is known to occur near north of Penitencia Creek road in Alum Rock Park approximately 15 miles to the southeast (CNDDB 2024). No individuals were observed during the January 2024 site visit, which was conducted at an appropriate time for the species to be detectable if present. Determined to be absent.
Saline clover (Trifolium hydrophilum)	CRPR 1B.2	Marshes and swamps, valley and foothill grasslands (mesic, alkaline), vernal pools (blooming period April to June)	Could Potentially Occur. Suitable valley and foothill grassland habitat with mesic soils to support this species is present on the project site. Saline clover is known to occur in the Don Edwards National Wildlife Refuge approximately 6.4 miles to the south (CNDDB 2024). The survey performed in January 2024 was too early in the year to detect this species. Thus, the possibility that the species may be present on the site cannot be ruled out.
Hospital Canyon larkspur (Delphinium californicum ssp. interius)	CRPR 1B.2	Chaparral (openings), cismontane woodland (mesic), coastal scrub (blooming period April to Junel)	Could Potentially Occur. Suitable cismontane woodland (mesic) habitat to support this species is present on the project site. Hospital Canyon larkspur is known to occur at Arroyo Mocho approximately 15 miles to the east (Calflora 2024). The survey performed in January 2024 was too early in the year to detect this species. Thus, the possibility that the species may be present on the site cannot be ruled out.
Caper-fruited tropidocarpum (Tropidocarpum capparideum)	CRPR 1B.1	Valley and foothill grassland (alkaline hills) (blooming period March to April)	Could Potentially Occur. Suitable valley and foothill grassland to support this species is present on site. Caper-fruited tropidocarpum is known to occur near Mountain House approximately 24 miles to the northeast (Calflora 2024). The survey performed in January 2024 was too early in the year to detect this species. Thus, the possibility that the species may be present on the site cannot be ruled out.
Mt. Diablo helianthella (Helianthella castanea)	CRPR 1B.2	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland (blooming period March to June)	Could Potentially Occur. Suitable cismontane woodland and valley and foothill grassland habitat to support this species is present on the project site. Mt. Diablo helianthella is known to occur in the Garin Woods approximately 5 miles to the north (Calflora 2024). The survey performed in January 2024 was too early in the year to detect this species. Thus, the possibility that the species may be present on the site cannot be ruled out.

Table 1	Spacial Status Plant Spacios	Thoir Status	and Potential for	Occurronco o	n the Project Site
	special-status riant species	, men status,	and Fotential for	Occurrence o	in the Project site
Name	*Status	Habitat and Blooming Period	Potential for Occurrence on the Project Site		
---	-----------	--	---		
Bent-flowered fiddleneck (Amsinckia lunaris)	CRPR 1B.2	Coastal bluff scrub, cismontane woodland, valley and foothill grassland (blooming period March to June)	Could Potentially Occur. Suitable woodland and grassland habitat to support this species is present on the project site. Bent-flowered fiddleneck is known to occur near San Leandro Creek and Cull Creek approximately 12 miles to the north (Calflora 2024). The survey performed in January 2024 was too early in the year to detect this species. Thus, the possibility that the species may be present on the site cannot be ruled out.		

*Key to Status Abbreviations: California Rare Plant Rank (CRPR).

CRPR 1B = Rare, Threatened, or Endangered in California and elsewhere

.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 = Moderately threatened in California (20-80% of occurrences threatened)

Name	*Status	Habitat	Potential for Occurrence on the Project Site			
Federal or State Endangere	ed, Threatened, or	r Candidate Species				
Monarch butterfly (<i>Danaus plexippus</i>)	FC	Requires milkweeds (<i>Asclepias</i> spp.) for egg-laying and larval development, but adults obtain nectar from a wide variety of flowering plants in many habitats. Individuals congregate in winter roosts, primarily in Mexico and in widely scattered locations on the central and southern California coast.	May be Present as Breeder. The monarch butterfly occurs throughout the region primarily as a migrant. No larval host plants were observed on the project site during the January 2024 survey; however, milkweeds, if present, would not have been detectable at that time of year. If milkweeds are present on the site, monarch butterflies may breed on the project site from March through October. However, due to the limited size of the site, only small numbers of monarch butterflies are expected to breed there, if any. Small numbers of individuals may forage throughout the project site, especially during spring and fall migration. However, the site does not provide high-quality foraging habitat for this species. While ostensibly suitable overwintering habitat for monarchs (i.e., eucalyptus trees) is present on the site, no monarch butterflies were observed during the January 2024 survey, and no current or historical overwintering sites are known as far inland as the project site; the nearest known overwintering location is 4.0 miles to the southwest at Eucalyptus Grove Park in the City of Newark (CNDDB 2024).			
Crotch's bumble bee (<i>Bombus crotchil</i>)	SC	Open grassland and scrub habitats.	May be Present as Breeder. Although this species was historically found throughout the southern two-thirds of California, population declines and range contractions have apparently made this species very scarce in the region (CDFW 2019). Nevertheless, recent surveys in the south San Francisco Bay area have detected this species at a number of locations, and there is some potential that the species may occur on the site. The nearest extant records of this species are located 6.65 miles to the northeast and 7 miles to the north (CNDDB 2024). Due to the limited size of the site and the apparently localized distribution of this species, there is a low probability that the species nests on the site, and most likely, only small numbers of this species occur there, if any.			

Table 2. Special-Status Animal Species, Their Status, and Potential for Occurrence on the Project Site

Name	*Status	Habitat	Potential for Occurrence on the Project Site
California tiger salamander (Ambystoma californiense)	FT, ST	Vernal or temporary pools in annual grasslands or open woodlands. Adults live terrestrially in small mammal burrows.	May be Present as Nonbreeder. The seasonal wetlands on the project site do not pond water for sufficient periods to support breeding by California tiger salamanders; thus, no suitable aquatic breeding habitat for this species is present on the project site. No known records are present within the species' potential dispersal distance (1.3 miles) from the site. Several records of California tiger salamanders are present within the site vicinity to the east, including known breeding locations 1.8 miles and 2.3 miles to the east and a nonbreeding record 2.5 miles to the east (CNDDB 2024). However, these occurrences are separated from the project site by Niles Canyon Road, which is expected to be a complete barrier to dispersal. Records of tiger salamanders west of Niles Canyon Road are located 5.5, 5.6, and 5.7 miles to the entheast (CNDDB 2024). Potentially suitable breeding ponds are present north of Niles Canyon Road (i.e., in locations from which California tiger salamanders can potentially disperse to the site) within the hills to the north 0.2 mile to the northwest (two ponds); 0.9 mile to the northwest; and 1.3 miles to the northeast (Google Inc. 2024). If California tiger salamanders breed in one or more of these ponds can potentially disperse to the site from those locations. However, the project site is bounded on two sides by busy roadways and is not situated in between aquatic breeding habitats for this species such that tiger salamanders are expected to travel past the site regularly when dispersing between aquatic habitats in the vicinity. Further, the project site does not provide high-quality dispersal for this species, the possibility that occasional dispersing individuals could occur on the site, and potentially use burrows on the site for aestivation and foraging, cannot be ruled out.

Name	*Status	Habitat	Potential for Occurrence on the Project Site
California red-legged frog (<i>Rana draytonii</i>)	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	May be Present as Nonbreeder. The seasonal wetlands on the project site do not pond water for sufficient periods to support breeding by California red-legged frogs; thus, no suitable aquatic breeding habitat for this species is present on the project site. Two records of California red-legged frogs are known within the species' potential dispersal distance (2 miles) from the site: one from a canal ditch 1.8 miles to the northwest, and one from a breeding pond 1.9 miles to the east (CNDDB 2024). However, the breeding pond to the east is separated from the site by Niles Canyon Road, which is expected to be a complete barrier to dispersal. Potentially suitable breeding ponds are present north of Niles Canyon Road (i.e., in locations from which California red-legged frogs can potentially disperse to the site) within the hills to the north 0.2 mile to the northwest (two ponds): 0.9 mile to the northwest; and 1.3, 1.8, and 1.9 miles to the northeast (Google Inc. 2024). California red-legged frogs from the known location 1.8 miles to the northwest, or that breed in one or more of the ponds within 2.0 miles of the site north of Niles Canyon Road, can potentially disperse to the site from those locations. However, the project site is bounded on two sides by busy roadways and is not situated in between aquatic breeding habitats for this species such that red-legged frogs are expected to travel past the site regularly when dispersing in between aquatic habitats in the vicinity. Further, the project site does not support high-quality aquatic habitat or suitable breeding habitat, and is subject to disturbance from regular mowing as well as public use of the park. Therefore, any individuals that occur on the site or remain there for any substantial length of time. Nevertheless, due to the proximity of known occurrences of this species and potentially suitable breeding ponds to the project site, the possibility that occasional dispersing individuals could traverse or briefly take refuge on the site cannot be ruled out.

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.	May be Present. This species is known to occur in the project vicinity approximately 0.3 mile to the southwest along Alameda Creek (CNDDB 2024). No suitable aquatic habitat to support this species occurs on the project site. Due to the lack of suitable aquatic habitat on the project site, as well as the presence of Niles Canyon Road between the site and Alameda Creek (which is expected to be a barrier to dispersal), the likelihood that pond turtles will disperse onto the site is low. However, the possibility that turtles from nearby areas along Alameda Creek would disperse to the site in search of breeding habitat cannot be ruled out. Thus, there is a low probability that individual turtles could occur on the site, and potentially establish a nest there.
Alameda whipsnake (Masticophis lateralis euryxanthus)	FT, ST	Foothills containing scrubland, oak woodland, and riparian zones interspersed with grassland and rock outcrops.	Absent. Although this species is known to occur within the project vicinity, suitable habitat in the form of rocky outcrops, scrubland, and riparian zones are absent from the project site and adjacent areas. This species requires features such as outcrops and other comparable forms of cover to facilitate dispersal, which are absent from the site as well as the adjacent grassland areas to the north. The nearest extant records of this species are approximately 2.5 miles to the northeast and 3.2 and 3.4 (two records) miles to the north (CNDDB 2024). These records are separated from the site by extensive grasslands that support only low-quality habitat and limited suitable refugia. Because suitable refugia are required for dispersal, Alameda whipsnakes are not expected to disperse to the site from known occurrences to the north and northeast.
Bald eagle (Haliaeetus leucocephalus)	SE, SP	Occurs mainly along seacoasts, rivers, and lakes; nests in tall trees or in cliffs, occasionally on electrical towers. Feeds mostly on fish.	May be Present in Adjacent Areas. An adult bald eagle was observed flying over the hills to the north of the site during the January 2024 survey. Bald eagles are known to nest in the project region at inland reservoirs, and they occur along Alameda Creek near the project site (Cornell Lab of Ornithology 2024). Suitable nesting habitat for this species is absent from the project site due to regular disturbance from public use of the park, but is present in large trees in surrounding areas. Although no bald eagle nests were observed in these areas during the January 2024 survey, and no known nests are present near the site, the possibility that up to one pair of eagles may establish an active nest near the site in the future cannot be ruled out. Individuals of this species will forage year-round along Alameda Creek to the east.

Name	*Status	Habitat	Potential for Occurrence on the Project Site
Tricolored blackbird (Agelaius tricolor)	ST	Nests near fresh water in dense emergent vegetation.	May be Present as Nonbreeder. In Alameda County, the tricolored blackbird has bred in only scattered locations where suitable habitat is present. This species typically nests in extensive stands of tall emergent herbaceous vegetation in non-tidal freshwater marshes and ponds. No suitable nesting habitat is present on the project site or its immediate vicinity. Thus, this species is expected to occur on the site only occasionally and in low numbers as a nonbreeding forager, if at all.
Mountain lion (Southern California/Central Coast ESU) (<i>Puma concolor</i>)	SC	Has a large home range size and occurs in a variety of habitats. Natal dens are typically located in remote, rugged terrain far from human activity. May occasionally occur in areas near human development, especially during dispersal.	May be Present as Nonbreeder. In the project region, there are verified sightings reported on BAPP.org (Bay Area Puma Project 2024) and numerous unpublished reports. This species occurs widely, though at low densities, throughout the region, and may disperse into lowland/valley floor areas. Mountain lions are not expected to regularly use the project site or establish a den on the site due to high levels of human activity and a lack of suitable denning habitat, but individuals may occur on the site as rare dispersants due to the site's location on the periphery of extensive natural areas that connect with regional park lands to the north.
California Species of Special C	Concern		
Northern harrier (Circus cyaneus)	CSSC (nesting)	Nests in marshes and moist fields, forages over open areas.	May be Present as Nonbreeder. No suitable nesting habitat is present on the project site or in the surrounding vicinity. This species is a common winter resident in open grassland and scrub habitats in the project vicinity, such as at Vargas Plateau Regional Park to the south (Cornell Lab of Ornithology 2024), and individuals may forage on the project site during migration and winter.
Burrowing owl (Athene cunicularia)	CSSC	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels.	May be Present. Burrowing owls are known to occur in the project vicinity, including approximately 2.0 miles to the south at a recorded wintering location as well as 4.5 miles to the southwest at a recorded breeding location (CNDDB 2024). Suitable habitat (i.e., grasslands with California ground squirrel burrows) is present on the project site to providing suitable nesting, roosting, and foraging habitat for this species. However, burrowing owls are unlikely to occur on the site due to the presence of large trees, which provide perches for predatory raptors. Should they occur in the area, they are more likely to be present in open grasslands areas to the north, where fewer trees are present.

Name	*Status	Habitat	Potential for Occurrence on the Project Site			
Vaux's swift (Chaetura vauxí)	CSSC(nesting)	Nest both in small colonies and as single pairs, occupying cavities in large snags, primarily in old-growth forests. They also occasionally use artificial cavities such as chimneys. Forage aerially.	May be Present as Nonbreeder. Although a number of trees on the site support large crevices, no large, hollow snags or live trees, or residential chimneys, are present on or adjacent the project site to support nesting by this species, and the species is not known to breed in the project vicinity. Individuals may forage aerially over the project site, during the breeding season and migration.			
Olive-sided flycatcher (Contopus cooperî)	CSSC (nesting)	Breeds in mature, primarily coniferous, forests with open canopies, along forest edges in more densely vegetated areas, in recently burned forest habitats, and in selectively harvested landscapes.	May be Present as Nonbreeder. No suitable nesting habitat is present on or adjacent to the project site. Occasional nonbreeding individuals may forage on the site, especially during migration.			
Loggerhead shrike (Lanius ludovicianus)	CSSC (nesting)	Nests in tall shrubs and dense trees; forages in grasslands, marshes, and ruderal habitats.	May be Present. Shrubs and trees on and adjacent to the project site provide ostensibly suitable nesting habitat for loggerhead shrikes, and grasslands on the site provide ostensibly suitable foraging habitat. No loggerhead shrikes or nests of this species were observed on or adjacent to the site during the January 2024 site visit; however, up to one pair of this species may nest in trees on or adjacent to the project site. Individuals may forage in open habitats on and adjacent to the site year-round.			
Yellow warbler (Setophaga petechia)	CSSC (nesting)	Nests in riparian woodlands.	May be Present. Suitable nesting habitat for yellow warblers is present in sycamore trees on the project site, and a pair may breed here. This species is also an abundant migrant throughout the project region during the spring and fall, when nonbreeding individuals may forage in woodland habitats throughout the site.			
Grasshopper sparrow (Ammodramus savannarum)	CSSC (nesting)	Nests and forages in grasslands, meadows, fallow fields, and pastures.	May be Present as Nonbreeder. No suitable nesting habitat for this species is present on the project site due to the limited extent of the grassland habitat and the presence of trees. This species prefers to nest in more extensive grasslands without trees, such as those present to the north. Small numbers of individuals may forage in grasslands on the project site year-round.			

Name	*Status	Habitat	Potential for Occurrence on the Project Site		
Bryant's savannah sparrow (Passerculus sandwichensis alaudinus)	CSSC	Nests in pickleweed dominant salt marsh and adjacent ruderal habitat.	May be Present as Nonbreeder. In the South San Francisco Bay, nests primarily in short pickleweed-dominated portions of diked/muted tidal salt marsh habitat and in adjacent ruderal habitats and higher- elevation grasslands in the Santa Cruz Mountains (Rottenborn 2007). No suitable nesting habitat occurs on the project site. Individuals of several savannah sparrow subspecies, including <i>alaudinus</i> , may forage on the project site during migration and winter.		
Pallid bat (Antrozous pallidus)	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	May be Present. Historically, pallid bats were likely present in a number of locations throughout the project region, but their populations have declined in recent decades. Several sycamore trees on the project site support large cavities that provide potentially suitable roosting habitat for a large colony or a maternit colony of this species. Individual pallid bats from colonies in the region could also occasionally forage on the project site.		
Townsend's big-eared bat (Corynorhinus townsendii)	CSSC	Roosts in caves and mine tunnels, and occasionally in deep crevices in trees such as redwoods or in abandoned buildings, in a variety of habitats.	May be Present as Nonbreeder. Townsend's big-eared bats are known from in a few scattered locations in the region to the southeast and northeast (CNDDB 2024). No suitable cavernous roosting habitat is present on the project site to support a roosting colony of this species, and individuals are not expected to roost in buildings near the site due to human disturbance. Individuals from colonies in the region may occasionally forage over the project site.		
Western red bat (<i>Lasiurus blossevillii</i>)	CSSC	Roosts in foliage in forest or woodlands, especially in or near riparian habitat.	Low Potential for Occurrence. Western red bats occur in the project vicinity in low numbers as migrants and winter residents, but this species does not breed in the region. Individual western red bats may roost in the foliage of trees virtually anywhere on the project site, but are expected to roost primarily in riparian areas, and thus are most likely to nest in sycamore trees on the site should they occur there at all. Occasional individuals may forage over the project site year-round.		
San Francisco dusky-footed woodrat (Neotoma fuscipes annectens)	CSSC	Nests in a variety of habitats including riparian areas, oak woodlands, and scrub.	Absent. No nests of this species were observed during the January 2024 site visit, thus confirming its absence from the site. Given the lack of evidence of past or current nesting of this species, woodrats are not expected to nest on the site in the near future. Determined to be absent.		

Name	*Status	Habitat	Potential for Occurrence on the Project Site	
American badger (Taxidea taxus)	CSSC	Burrows in grasslands and occasionally in infrequently disked agricultural areas.	May be Present as Nonbreeder. Known to occur in the project region primarily in extensive grasslands and scrub habitats. Badger are not expected to regularly use the project site or establish a der there due to the limited extent of habitat on the site and high leve of human activity from use of the park. However, individuals may occur on the site as rare dispersants or foragers due to the site's location on the periphery of open habitats to the north, as well as the presence of prey such as California ground squirrels.	
State Fully Protected Species				
Golden eagle (Aquila chrysaetos)	SP	Breeds on cliffs or in large trees (rarely on electrical towers); forages in open areas.	May be Present as Nonbreeder. No suitable nesting habitat for golden eagles is present on the project site due to disturbance from human use of the park. Golden eagles are known to nest in the project vicinity, and an individual with nesting material was observed flying over a ridge to the northeast, on the northwest side of Niles Canyon Road, in 2021 (Cornell Lab of Ornithology 2024). Based on this observation, golden eagles are not expected to nest within line-of-sight of the project site, or close enough to the site to be affected by work activities. Individuals of this species can potentially forage on the site year-round.	
White-tailed kite (Elanus leucurus)	SP	Nests in tall shrubs and trees; forages in grasslands, marshes, and ruderal habitats.	May be Present. White-tailed kites are common residents in open areas in the project vicinity. Trees on and adjacent to the project site, especially those with dense foliage, provide suitable nesting habitat for this species. No white-tailed kites or nests of this species were observed on or adjacent to the site during the January 2024 site visit; however, up to one pair of white-tailed kites may nest in trees on or adjacent to the project site. Individuals may forage in open habitats on and adjacent to the site year-round.	
Ringtail (Bassariscus astutusi)	SP	Occurs in forests and shrublands, often in close association with rocky areas or riparian habitats. Nests in rock recesses, hollow trees, logs, snags, abandoned burrows, or woodrat nests.	May be Present as Nonbreeder. This species occurs in the project region only in very low numbers, and the status of the species in Alameda County is not well known. No suitable rocky habitat to support this species is present on the project site. However, the possibility that individuals from populations in the vicinity may occur on the site as occasional dispersants or foragers cannot be ruled out.	

*Key to Abbreviations: Status: Federally Threatened (FT); Federal Candidate for Listing (FC); Federal Proposed Threatened (FPT); State Endangered (SE); State Threatened (ST); State Candidate for Listing (SC); State Fully Protected (SP); California Species of Special Concern (CSSC).

obsoletus), California black rail (Laterallus jamaicensis coturniculus), western snowy plover (Charadrius nivosus nivosus), California least tern (Sternula antillarum browni), Alameda song sparrow (Melospiza melodia pusillula), salt marsh harvest mouse (Reithrodontomys raviventris), salt marsh wandering shrew (Sorex vagrans halicoetes), longfin smelt (Spirinchus thaleichthys), and delta smelt (Hypomesus transpacificus).

No aquatic habitats to support special-status fish species are present on the project site. Alameda Creek, located approximately 75 feet southeast of the site, supports a number of special-status fish species including the Central California Coast steelhead (*Oncorbynchus mykiss*), Chinook salmon (*Oncorbynchus tshanytscha*), Pacific lamprey (*Entosphenus tridentatus*), Sacramento hitch (*Lavinia exilicauda exilicauda*), riffle sculpin (*Cottus gulosus*), and Central California roach (*Lavinia symmetricus symmetricus*). Due to the separation of the creek from the project site by developed areas, and with compliance with water quality protection measures, these species would not be affected by the proposed project.

No nests of the San Francisco dusky-footed woodrat, a California species of special concern, were observed on the project site during the January 2024 site visit. Therefore, this species is determined to be absent from the site. The site does not provide high-quality habitat for the Alameda whipsnake (*Masticophis lateralis euryxanthus*), a federally and state-threatened species, and separated from such habitat by extensive grasslands; thus, this species is not expected to occur. The mountain lion, a candidate for listing under CESA; the ringtail (*Bassariscus astutus*), a state fully protected species; and the Townsend's big-eared bat (*Corynorhinus townsendii*) and American badger, which are California species of special concern, are unlikely to occur on the site, but due to the site's proximity to extensive natural areas it is possible that individuals of these species can occasionally forage on the site in low numbers. However, these species are expected to den, roost, or breed on or immediately adjacent to the project site due to a lack of suitable habitat, and they will be affected very little, if at all, by the proposed project.

Special-status bird species that may occasionally occur on the project site as nonbreeding foragers, but that do not nest on the site, include the northern harrier (*Circus hudsonius*), tricolored blackbird, and Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*). In addition, the Vaux's swift (*Chaetura vauxi*), olive-sided flycatcher (*Contopus cooperi*), and grasshopper sparrow are bird species that are considered a California species of special concern only when nesting; they may occur occasionally in grasslands on the project site as nonbreeding transients, foragers, or migrants, but no suitable nesting habitat for these species occurs on the project site.

The Crotch's bumble bee, monarch butterfly, California red-legged frog, California tiger salamander, northwestern pond turtle, burrowing owl, bald eagle, golden eagle (*Aquila chrysaetos*), loggerhead shrike (*Lanius ludovicianus*), white-tailed kite (*Elanus leucurus*), yellow warbler (*Setophaga petechia*), western red bat (*Lasiurus blossevillii*), and pallid bat (*Antrozous pallidus*) are addressed in greater detail in this report, because these species can potentially breed or occur on or immediately adjacent to the project site and/or may be significantly impacted by the proposed project, or otherwise warrant further discussion (see Table 2 and Section 6 *Impacts and Mitigation Measures* below)

5.3 Sensitive Natural Communities, Vegetation Alliances, and Habitats

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 are a reflection of the condition of a habitat within California. Natural communities 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.

5.3.1 Sensitive Natural Communities

A query of sensitive natural communities in the CNDDB (2024) identified four sensitive natural communities as occurring within the nine 7.5-minute USGS quadrangles containing or surrounding the project site: northern coastal salt marsh (Rank G3/S3.2), sycamore alluvial woodland (Rank G1/S1.1), serpentine bunchgrass (Rank G2/S2.2), valley needlegrass grassland (G3/S3.1), and valley sink scrub (G1/S1.1). No sensitive natural communities are present on the project site. The remnant sycamore woodland on the site is not considered a sensitive sycamore alluvial woodland community because no wetland hydrology is associated with this habitat.

5.3.2 Sensitive Vegetation Alliances

None of the habitat types on the site represent or include sensitive vegetation alliances.

5.3.3 CDFW Riparian Habitat

No riparian habitat is present on or adjacent to the project site. The remnant sycamore woodland on the site should not be subject to CDFW jurisdiction because no wetland hydrology is associated with this habitat.

5.3.4 Sensitive Habitats (Waters of the U.S./State)

The seasonal wetlands on the project site are not expected to be considered waters of the U.S. because they are isolated from traditional navigable waters and their relatively permanent tributaries. However, these wetlands are expected to be considered waters of the state.

5.3.5 Nonnative and Invasive Species

Several nonnative, invasive plant species occur on the project site (Appendix A). Of these, several have a "limited" rating by the California Invasive Plant Council (Cal-IPC), indicating they are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic. These "limited" species include Peruvian pepper, field mustard, wild radish, milk thistle, and hyssop-leaf loosestrife. Species with a "moderate" rating by the 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 on ecological disturbance: Bermuda buttercup, tree of heaven, and blue gum eucalyptus. Species with a "high" invasive rating by the 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). On the project site, species with a "high" rating include English ivy. Due to these species' ubiquity in the region, project activities are not expected to result in the spread of nonnative and invasive plant species.

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 based on the project description and plans provided to us by the City through February 2024. Based on this information, it is our understanding that all project impacts including grading, construction, staging, and access will occur within the limits of boundaries provided.

Potential impacts on existing biological resources were evaluated by comparing the quantity and quality of habitats present on the project site under baseline conditions to the anticipated conditions after implementation of the proposed project. Direct and indirect impacts on special-status species and sensitive natural communities

were assessed based on the potential for the species, their habitat, or the natural community in question to be disturbed or enhanced following implementation of the proposed project.

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 Regionally Common Habitats and Associated Common Plant and Wildlife Species (Less than Significant)

Proposed project activities would result in the temporary disturbance and/or permanent removal of 1.75 acres of California annual grassland, 0.22 acre of coast live oak woodland, 0.57 acre of developed areas, and 0.18 acres of ornamental woodland from the project site. These impacts would reduce the extent of vegetation and trees within the impact area and result in a reduction in the abundance of some of the common plant and wildlife species that occur there. However, the project site occurs in a location in Fremont that has been subject to disturbance in the past, is regularly disturbed (e.g., due to mowing and public use of the park), and is on the periphery of a developed area such that these habitats do not provide regionally rare or especially high-value habitat for native vegetation, wildlife, or special-status species. In addition, these habitats are abundant and widespread regionally, are not particularly sensitive, and are not especially valuable (from the perspective of providing important plant or wildlife habitat) or exemplary occurrences of these habitat types. Therefore, project impacts on these habitats are considered less than significant under CEQA. Further, because the number of individuals of any common plant or animal species within these habitats, and the proportion of these species' regional populations that could be disturbed, is very small, the project's impacts would not substantially reduce regional populations of these species. Thus, these impacts do not meet the CEQA standard of having a *substantial* adverse effect and would not be considered significant under CEQA.

6.1.2 Impacts on Water Quality and Special-Status Fish (Less than Significant)

No direct impacts are proposed within Alameda Creek, which flows approximately 75 feet southeast of the project site, or to the two seasonal wetlands present on the project site (Figure 3).

The project would be required to comply with all applicable laws and regulations addressing water quality. 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 storm water 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 require 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.

In many Bay Area counties, including Alameda 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). This permit requires that all projects implement BMPs and incorporate Low Impact Development practices into the design to prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site after construction has been completed. In order to meet these permit and policy requirements, projects must incorporate the use of green roofs, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors.

With compliance with all applicable laws and regulations, including the above-referenced state requirements for storm water discharge and NPDES permit requirements, the project would not result in significant impacts to water quality within the on-site wetlands, and this impact is less than significant.

6.1.3 Impacts on Special-Status Plants (Less than Significant with Mitigation)

Five special-status plant species could potentially occur on the project site: caper-fruited tropidocarpum (a CRPR 1B.1 species); and Hospital Canyon larkspur, saline clover, bent-flowered fiddleneck, and Mt. Diablo helianthella (CRPR 1B.2 species). These species could potentially occur in broadleaved upland forest, valley and foothill grassland, and seasonal wetland habitats on the project site, but surveys for these species during the appropriate blooming periods have not yet been performed to determine presence/absence. If any special-status plant species occur on the project site, the project could impact these plants due to disturbance or destruction of individuals and suitable habitat. Direct impacts could include grading or filling areas supporting the species, trampling or crushing of plants, and soil compaction. Indirect impacts could include increased mobilization of dust onto plants, which can affect their photosynthesis and respiration, or changes to hydrology supporting these plants due to grading or construction in nearby habitats.

Conservation of special-status plant species is important because their populations contribute to preserving genetic resources and help ensure persistence of these rare species in the county and state. Due to the regional rarity of these species, impacts to more than 10% of a population (by individuals or occupied area) of CRPR List 1B species could result in the loss of that population, thereby contributing to a reduction in the species' abundance and genetic resources. Such an impact would therefore be considered significant under CEQA. Impacts to 10% or less of a CRPR 1B population would not be expected to cause the extirpation of such a population as long as the remaining plants are avoided and protected.

Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 below will reduce these impacts to a less-than-significant level.

Mitigation Measure BIO-1. Pre-Activity Surveys for Special-Status Plants. Prior to initial ground disturbance for project-related activities, appropriately timed, presence/absence surveys for special-status plant

species will be conducted by a qualified plant ecologist on the project site and within a 50-foot surrounding buffer to assess the presence or absence of these species. This buffer may be increased by the qualified plant ecologist depending on site-specific conditions and activities planned in the area, but will be at least 50 feet in width. Situations for which a greater buffer may be required include proximity to proposed activities expected to generate large volumes of dust, such as grading, or the potential for project activities to alter hydrology supporting habitat for the species. Based on the flowering periods of special-status plant species that could potentially occur on the site, surveys will need to occur at least two different times of year to ensure that they occur during appropriate periods for detecting these species: early spring from March to April (to detect caperfruited tropidocarpum), and late spring from April to June (to detect saline clover, Hospital Canyon larkspur, Mt. Diablo Helianthella, and bent-flowered fiddleneck). The surveys will be conducted in a year with sufficient precipitation to detect these species; alternatively, if these species are determined to be detectable in appropriate reference populations (regardless of precipitation), surveys for these species on the project site can be determined to be valid even if precipitation is well below average. Within the year in which surveys are conducted, mowing must be avoided prior to the surveys so that these species can be detectable if present. If any special-status plants are detected, the plant ecologist will use any available means to determine the abundance and extent of the population, even if the population continues off-site.

If pre-activity surveys detect no special-status plants, then no further mitigation related to the protection of these species is necessary. If special-status plants are detected, then Mitigation Measures BIO-2, and BIO-3 if necessary, will be implemented.

Mitigation Measure BIO-2. Avoidance Buffers. To the extent feasible, and in consultation with a qualified plant ecologist, the City will construct the proposed project to completely avoid impacts on at least 90% (and ideally all) of individuals in the populations of CRPR 1B plant species on the project site or close enough to the site to be affected by the project. Avoided special-status plant populations will be protected by establishing and observing the identified buffer between plant populations and the impact area. All such populations located in the impact area or the identified buffer, and their associated designated avoidance areas, will be clearly depicted on any construction plans. In addition, prior to initial ground disturbance or vegetation removal, the limits of the identified buffer around special-status plants to be avoided will be marked in the field (e.g., with flagging, fencing, paint, or other means appropriate for the site in question). This marking will be maintained intact and in good condition throughout project-related construction activities.

If complete avoidance is not feasible and more than 10% of a population (by occupied area or individuals) of CRPR 1B plant species will be impacted by the project as determined by a qualified plant ecologist, Mitigation Measure BIO-3 will be implemented.

Mitigation Measure BIO-3. Preserve, Enhance, and Manage Mitigation Populations. If avoidance of special-status plant species is not feasible and more than 10% of a population (by occupied area or individuals) of CRPR 1B plant species would be impacted, compensatory mitigation will be provided via the preservation, enhancement, and management of occupied habitat for the species, or the creation and management of a new

population. To compensate for impacts on these plants, off-site habitat occupied by the affected species will be preserved and managed in perpetuity at a minimum 1:1 mitigation ratio (at least one plant preserved for each plant affected, and at least one occupied acre preserved for each occupied acre affected), for all impacts to the affected species (i.e., not just the impacts above the 10% threshold). Alternately, seed from the population to be impacted may be harvested and used either to expand an existing population (by a similar number/occupied area to compensate for all impacts to the species) or establish an entirely new population in suitable habitat.

Areas proposed to be preserved as compensatory mitigation for impacts to special-status plant species must contain verified extant populations of the species, or in the event that enhancement of existing populations or establishment of a new population is selected, the area must contain suitable habitat for the species as identified by a qualified plant ecologist. Mitigation areas will be managed in perpetuity to encourage persistence and even expansion of this species. Mitigation lands cannot be located on land that is currently held publicly for resource protection unless substantial enhancement of habitat quality will be achieved by the mitigation activities. The mitigation habitat will be of equal or greater habitat quality compared to the impacted areas, as determined by a qualified plant ecologist, in terms of soil features, extent of disturbance, vegetation structure, and dominant species composition, and will contain at least as many individuals of the species as are impacted by project activities. The permanent protection and management of mitigation lands will be ensured through an appropriate mechanism, such as a conservation easement or fee title purchase. A habitat mitigation and monitoring plan (HMMP) will be developed by qualified plant or restoration ecologists and implemented for the mitigation lands. That plan will include, at a minimum, the following information:

- a summary of impacts to the special-status plant species in question, including impacts to its habitat, and the proposed mitigation;
- a description of the location and boundaries of the mitigation site and description of existing site conditions;
- a description of measures to be undertaken to enhance (e.g., through focused management that may include removal of invasive species in adjacent suitable but currently unoccupied habitat) the mitigation site for the species;
- a description of measures to transplant individual plants or seeds from the impact area to the mitigation site, if appropriate (which will be determined by a qualified plant or restoration ecologist);
- proposed management activities to maintain high-quality habitat conditions for the species;
- a description of habitat and species monitoring measures on the mitigation site, including specific, objective final and performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc. At a minimum, performance criteria will include demonstration that any plant population fluctuations over the monitoring period of a minimum of 5 years for preserved populations and a minimum of 10 years for enhanced or established populations do not indicate a downward trajectory in terms of reduction in numbers and/or occupied area for the preserved mitigation population that can be attributed

to management (i.e., that are not the result of local weather patterns, as determined by monitoring of a nearby reference population, or other factors unrelated to management);

- if a new population is established, the new population must contain at least 200 individuals or the same number of impacted individuals, whichever is greater, by year 5. This is to ensure the created population will be large enough to expect to persist and gain sufficient dedicated pollination services. If year 5 is a poor weather year for summer and fall-blooming annual plants and reference populations show a decline, this criteria can be measured in the next year occurring with average or better rainfall; and
- contingency measures for mitigation elements that do not meet performance criteria. For example, if by year 5 (or the next suitable rainfall year after year 5) of monitoring, the project is unable to establish a self-sustaining population of the required number of individuals as described above, the applicant shall preserve and manage an extant population of that same species under a revised HMMP.

Approval of the HMMP by the City will be required before project impacts to special-status plant species occur.

6.1.4 Impacts on the Monarch Butterfly and Crotch's Bumble Bee (Less than Significant)

Project activities will temporarily and/or permanently impact 1.75 acres of California annual grassland, 0.22 acre of coast live oak woodland, 0.92 acre of sycamore woodland, and 0.18 acre of ornamental woodland that may be occupied by monarch butterflies. Given the small size of the project site and the lack of any evidence that it supports high densities of the larval host plant (milkweed), nectar plants, or an overwintering site, few, if any, monarch butterflies are expected to be present on the project site when work occurs. Nevertheless, project activities could result in the loss of larval host plants and adult nectar sources for monarch butterflies, and potentially also the loss of eggs, larvae, or pupae due to crushing by construction personnel or equipment, vegetation removal, excavations, and placement of soil stockpiles.

The California grassland habitat on the project site provides only low-quality foraging habitat for Crotch's bumble bee, as the area is dominated by grasses with sparse floral resources. Although field mustard is prevalent in portions of this habitat, mustards are not heavily used by Crotch's bumble bees. In addition, these grasslands are regularly maintained by mowing, which periodically removes any floral resources that may be present. Individual Crotch's bumble bees may occur occasionally and in small numbers as foragers throughout the project site, and the possibility that nesting could occur on the site (e.g., in a ground squirrel burrow) cannot be ruled out. Nevertheless, should small numbers of individuals be present, construction activities could result in the loss of nesting and foraging habitat for Crotch's bumble bees, and potentially the loss of individuals in nests due to crushing by construction personnel or equipment, excavation, and placement of soil stockpiles.

The proposed project would impact only a very small proportion of these species' regionally available habitat and populations, and the number of individuals likely to be displaced by habitat disturbance and loss would be very small with respect to the amount of suitable habitat available in the local area and the region. Thus, due to the abundance of suitable habitat in the project region and the lack of any evidence that large numbers of either species occurs on the project site, project activities are not expected to result in a substantial impact on breeding and foraging habitat for monarch butterflies or Crotch's bumble bees. Therefore, the potential loss of small numbers of individuals as a result of the project, as well as the permanent loss of potential breeding and foraging habitat, would not rise to the CEQA standard of having a *substantial* adverse effect, and these impacts would thus not constitute a significant impact on these species or their habitats under CEQA.

6.1.5 Impacts on the California Tiger Salamander and California Red-Legged Frog (Less than Significant with Mitigation)

There is a very low potential for California red-legged frogs and California tiger salamanders to be present on the project site when construction occurs, and thus, the project is unlikely to impact these species. However, the potential for occurrence of occasional dispersants cannot be eliminated. If individuals are present on the site, construction activities associated with the proposed project could result in direct impacts on individual California red-legged frogs and California tiger salamanders due to injury or mortality from vehicle traffic, equipment use, and worker foot traffic. In addition, individuals may be crushed in their refugia (e.g., in burrows) or trapped and suffocated by the passage of heavy equipment. An increase in native and nonnative predators attracted to the project site due to trash left on the work site might temporarily result in increased mortality of individuals of these species. Such impacts would be temporary in nature, occurring only during construction activities. Nevertheless, because of the regional rarity of these species, project-related mortality of any individual California red-legged frogs or California tiger salamanders would be significant under CEQA.

The project will implement measures required by the City Municipal Code and described in Section 1.3 above to protect California tiger salamanders on the project site. These include installing exclusion fencing around the perimeter of the project site, conducting pre-construction surveys prior to grubbing and grading, and providing a qualified biologist to monitor initial grubbing and grading activities. These measures are expected to help avoid and minimize project impacts on California tiger salamanders and California red-legged frogs by preventing individuals from entering the project site, and minimizing the likelihood that any individuals that may be present in the work area within the exclusion fencing when work begins would be injured or killed by work activities. Nevertheless, residual impacts would remain due to the disturbance of any individuals found on the site during the course of construction, and if trash present on the site attracts predators that would prey on these species. Implementation of Mitigation Measures BIO-4 through BIO-6 will ensure that project impacts on California tiger salamanders are reduced to a less-than-significant level under CEQA.

In addition, 2.36 acres of California annual grassland, coast live oak woodland, ornamental woodland, and remnant sycamore woodland habitat will be permanently converted by the project into developed areas, and an additional 0.72 acre of these habitats will be temporarily disturbed by the project. These habitats provide suitable dispersal and refugial habitat for California red-legged frogs and California tiger salamanders. However, this habitat is of low quality for both of these species due to lack of aquatic breeding ponds on and adjacent to the project site; high levels of disturbance from human use of the park and regular mowing activities; as well as the very low probability that California red-legged frogs and/or California tiger salamanders use these habitats on the project site. Also, similar grassland and woodland habitats are widespread and regionally abundant, and

much higher-quality grassland and potential aquatic breeding habitat for these species is present in the hills to the north. Therefore, the loss of 2.36 acres of low-quality dispersal and refugial habitat would not reduce regional populations of these species or impede their ability to move across the landscape. Thus, this impact is considered less than significant under CEQA, and no compensatory mitigation for the loss of this habitat is warranted.

Mitigation Measure BIO-4. Worker Environmental Awareness Program. Before any construction activities begin, a qualified biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog, California tiger salamander, northwestern pond turtle, their habitat, the importance of these species, the general measures that are being implemented to conserve them as they relate to the project, and the boundaries within which the project may be accomplished.

Mitigation Measure BIO-5. Protocol if a California Red-legged Frog, California Tiger Salamander, or Northwestern Pond Turtle is Encountered. If a California red-legged frog, California tiger salamander, or any animal that construction personnel believes may be either of these species, is encountered during the course of project activities, the following procedures will be followed:

- All work that could result in the injury, disturbance, or harassment of the individual animal shall immediately cease.
- The foreperson and qualified biologist will be immediately notified.
- The qualified biologist will determine if the animal is a California red-legged frog, California tiger salamander, or northwestern pond turtle and, if so, the USFWS and/or CDFW (as appropriate) will be contacted for further guidance before any construction activities resume.

Mitigation Measure BIO-6. Trash Removal. All food-related trash within the work area will 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 will be removed from the project site at the end of each work day.

6.1.6 Impacts on the Northwestern Pond Turtle (Less than Significant with Mitigation)

There is a low potential for northwestern pond turtles to be present on the project site when construction occurs, and thus, the project is unlikely to impact this species. However, the potential for occurrence of occasional dispersants or nesting individuals cannot be eliminated. If individuals are present on the site, construction activities associated with the proposed project could result in direct impacts on individual northwestern pond turtles and their nests due to injury or mortality from vehicle traffic, equipment use, and worker foot traffic. An increase in native and nonnative predators attracted to the project site due to trash left on the work site might temporarily result in increased mortality of individuals of these species. Such impacts would be temporary in nature, occurring only during construction activities. Nevertheless, because of the

regional rarity of these species, project-related mortality of any individual northwestern pond turtles would be significant under CEQA.

In addition, 3.07 acres of suitable dispersal habitat for northwestern pond turtles would be temporarily disturbed or permanently lost due to project construction. Areas of bare or sparsely vegetated ground within these areas provide suitable nesting habitat for this species would also be temporarily disturbed or permanently lost. However, this habitat is of low quality due to human disturbance, the limited extent of the habitat, and the low probability that these species would travel from nearby aquatic habitats to reach the habitats on the project site. Also, the grassland and woodland habitats on the site are widespread and regionally abundant. Therefore, the temporary disturbance or permanent loss of 3.07 acres of low-quality dispersal and nesting habitat for northwestern pond turtles would not reduce regional populations of this species or impede its ability to move across the landscape. Thus, no compensatory mitigation for the loss of this habitat is warranted.

The project will implement measures required by the City Municipal Code and described in Section 1.3 above to protect California tiger salamanders on the project site. These include installing exclusion fencing around the perimeter of the project site, conducting pre-construction surveys prior to grubbing and grading, and providing a qualified biologist to monitor initial grubbing and grading activities. These measures are expected to help avoid and minimize project impacts on northwestern pond turtles by preventing individuals from entering the project site. Nevertheless, residual impacts would remain due to the potential loss or disturbance of any individuals found on the site during the course of construction, and if trash present on the site attracts predators that would prey on this species. Implementation of Mitigation Measures BIO-4 through BIO-6 above, as well as Mitigation Measure 7 below, will ensure that project impacts on northwestern pond turtles are reduced to a less-than-significant level under CEQA.

Mitigation Measure BIO-7. Pre-construction Survey. A qualified biologist shall survey the project site within 48 hours of the initiation of project activities, including ground disturbance and vegetation removal, looking for individual northwestern pond turtles and their nests. If any individuals or nests are detected during this survey, Mitigation Measure BIO-5 above will be implemented.

6.1.7 Impacts on the Burrowing Owl (Less than Significant)

Suitable burrows to support burrowing owl nesting and overwintering activities are present on the project site. Individual burrowing owls may be affected during construction activities, if present on or very close to the project site. Because they roost underground, burrowing owls may be killed or injured during development activities from trampling or compaction of burrows by construction personnel or equipment if appropriate protective measures are not implemented. Construction activities that occur in close proximity to active burrows may disturb owls to the point of abandoning their burrows, potentially resulting in the loss of eggs or young in active nests. Due to the regional rarity of this species, project-related mortality of any individual burrowing owls would be significant under CEQA. The project will implement measures required by the City Municipal Code and described in Section 1.3 above to protect burrowing owls on and adjacent to the project site. These include conducting preconstruction surveys prior to the start of project activities, implementing no-disturbance buffer zones around occupied burrows, and passively relocating burrowing owls during the nonbreeding season. These measures are expected to help avoid and minimize project impacts on burrowing owls by ensuring that any individuals present on and adjacent to the site are detected and avoided prior to the start of construction, ensuring that work activities do not occur sufficiently close to occupied burrows to disturb burrowing owls, and relocating owls from the site during the nonbreeding season. With the implementation of these measures, project impacts on individual burrowing owls are reduced to less-than-significant levels under CEQA.

The project would also result in the temporary and/or permanent loss of 1.75 acres of suitable nesting, roosting, and foraging habitat for burrowing owls in California annual grasslands on the project site. However, the grassland habitat on the project site is limited in extent, and provides only very low-quality habitat for burrowing owls due to the presence of adjacent trees, which provide perches for predatory raptors that prey on burrowing owls. Thus, the temporary and/or permanent loss of 1.75 acres of this habitat as a result of the project would not remove high-quality or important habitat necessary to support burrowing owl populations in the region, and project impacts on this habitat would therefore not constitute a significant impact under CEQA.

6.1.8 Impacts on the Bald Eagle and Golden Eagle (Less than Significant)

No impacts on nesting golden eagles are expected to occur as a result of the project, as evidence of nesting activity in the site vicinity has been sufficiently far from the project site to ensure that indirect disturbance of nesting individuals would not occur. Construction activities might result in a temporary direct impact through the alteration of foraging patterns (e.g., avoidance of the site because of increased noise and activity levels during project activities) but would not result in the loss of individuals, as individuals of this species would move away from any construction areas or equipment before they could be injured or killed. Therefore, this impact would be less than significant under CEQA.

Bald eagles are not expected to nest on the site itself; however, suitable nesting habitat for this species is present in large trees in surrounding areas, and up to one pair of bald eagles can potentially establish an active nest near the site in the future. Activities that occur during the nesting season and cause a substantial increase in noise or human activity near active nests can potentially result in the abandonment of an active nest (i.e., nests with eggs or young) of this species. Due to the regional rarity of breeding pairs of this species, the loss of an active nest of bald eagles, or the abandonment of a nesting territory as a result of the project, would be significant under CEQA.

The project will implement measures required by the City Municipal Code and described in Section 1.3 above to protect nesting birds, including bald eagles. These include avoiding construction during the nesting season, conducting pre-construction surveys prior to the start of work, and implementing protective buffer zones around active nests. Because bald eagles can potentially nest near the site, the pre-construction survey for bald eagle nests will include all accessible/visible areas within 660 feet of the project site, as this is the distance

specified by the USFWS at which these types of activities can potentially disturb nesting bald eagles (USFWS 2007). Thus, in the unlikely event that a bald eagle establishes a new nest near the site, these measures are expected to avoid and minimize project impacts on bald eagles by ensuring that any active nest close enough to the site to be affected by the project is identified, and an appropriate non-disturbance buffer is maintained to avoid impacts on the nesting eagles.

No suitable foraging habitat for bald eagles is present on the project site. Golden eagles can potentially forage on the project site; however, the site does not provide important foraging habitat used regularly or by large numbers of this species. As a result, impacts of the project will have little impact on these species' foraging habitat, and the temporary loss and/or permanent disturbance of 3.07 acres of suitable golden eagle foraging habitat on the project site would have no substantive impact on regional populations of these species.

6.1.9 Impacts on Nonbreeding Special-Status Birds and Mammals (Less than Significant)

Several special-status bird and mammal species may occur on the project site as nonbreeding migrants, transients, or foragers, but they are not known or expected to breed or occur in large numbers within or near the project impact area. These are the northern harrier, Vaux's swift, olive-sided flycatcher, tricolored blackbird, Bryant's savannah sparrow, grasshopper sparrow, mountain lion, American badger, ringtail, Townsend's big-eared bat, and western red bat.

The northern harrier, Vaux's swift, olive-sided flycatcher, and Bryant's savannah sparrow (California species of special concern) as well as the tricolored blackbird (a state threatened species) are not expected to occur on or close to the project site as breeders due to the absence of suitable habitat, but individuals may occur occasionally as foragers during the nonbreeding season. The grasshopper sparrow (a California species of special concern) breeds in expansive grassland habitats to the north and east, and individuals may occasionally forage in grasslands on the project site year-round. Due to the site's location on the periphery of open space areas of the Diablo Range, the mountain lion (a state candidate species) may briefly traverse the site as nonbreeding dispersants or foragers, but they are not expected to linger for any length of time due to disturbance from human use of the park. The Townsend's big-eared bat may occur on the project site as an occasional forager, but is not expected to breed or roost on the project site due to a lack of suitable habitat and existing human activity on the site, and there are no known maternity colonies on or adjacent to the project site on rare occasions. The western red bat (a California species of special concern) may roost in small numbers in trees on the project site, especially within mature sycamores, but it does not breed in the project region.

Activities under the proposed project would have some potential to impact foraging habitats and/or disturb individuals of these species. Construction activities might result in a temporary direct impact through the alteration of foraging patterns (e.g., avoidance of the site because of increased noise and activity levels during project activities) but would not result in the loss of individuals, as individuals of these species would 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, impacts of the project will have little impact on these species' foraging habitat and no substantive impact on regional populations of these species. Therefore, this impact would be less than significant under CEQA.

6.1.10 Impacts on the Loggerhead Shrike, White-Tailed Kite, and Yellow Warbler (Less than Significant)

The white-tailed kite (a state fully protected species) and loggerhead shrike (a state species of special concern when nesting) may nest in trees and shrubs on and adjacent to the project site. In addition, the yellow warbler (a state species of special concern when nesting) may nest within the remnant sycamore woodland on the site. Activities that occur during the nesting season and cause a substantial increase in noise or human activity near active nests may result in the abandonment of active nests (i.e., nests with eggs or young). Heavy ground disturbance, noise, and vibrations caused by project activities could potentially disturb nesting and foraging individuals and cause them to move away from work areas. In addition, the project would result in the temporary disturbance and permanent loss of 3.07 acres of suitable nesting habitat for white-tailed kites and loggerhead shrikes, and 0.92 acre of suitable nesting habitat for the yellow warbler.

Based on site observations, the areal extent of suitable habitats on and adjacent to the project site, and known nesting densities of these species, no more than one pair of each species could potentially nest on or immediately adjacent to the project site. Because the number of nesting pairs that could be disturbed is very small (i.e., one pair of each species), the number of individuals impacted by project activities would represent a very small fraction of the regional population of these species. Further, the nesting and foraging habitats that would be impacted are widespread and regionally abundant, and represent a very small fraction of the regionally available habitat of this type. Therefore, neither the potential loss of eggs or young, nor the disturbance/loss of nesting and foraging habitat, would rise to the CEQA standard of having a *substantial* adverse effect, and these impacts would be less than significant under CEQA. However, as discussed in Section 3 above, all native migratory birds, including raptors, are protected under the MBTA and California Fish and Game Code. The City will implement measures to comply with these laws as described in Section 1.3 above including avoiding construction during the nesting season, conducting pre-construction surveys prior to the start of work, and implementing protective buffer zones around active nests. With the implementation of these measures, the project will avoid and minimize effects on nesting special-status birds on and adjacent to the project site.

6.1.11 Impacts on Common and Special-Status Species of Roosting Bats (Less than Significant)

Common bat species, such as the Yuma myotis, California myotis, big brown bat, and Mexican free-tailed bat, as well as the pallid bat, a California species of special concern, can potentially roost in sycamore trees containing large cavities on the project site. No evidence of a colony of roosting bats was detected in trees on the site during the January 2024 survey, but the presence of a large colony of a common species of roosting bats, or a colony of pallid bats of any size, could not be ruled out. When trees containing roosting colonies or individual bats are removed or modified, individual bats can be physically injured or killed, can be subjected to

physiological stress from disturbance during torpor, or can face increased predation because of exposure during daylight. In addition, nursing young may be subjected to disturbance-related abandonment by their mothers. However, no trees identified as potentially suitable for roosting by bats are shown on the project's plans as slated for removal. Nevertheless, project activities occurring in close proximity to potentially occupied roost trees could result in increased predation (e.g., of adults as they leave the colony during the day), the abandonment of a roost location, or the abandonment of dependent young in a maternity roost due to indirect disturbance. Impacts on a moderate-sized maternity colony of common species that have potential to occur on the site, or impacts on a pallid bat colony of any type (i.e., a maternity or non-maternity colony) or size, would be considered a substantial effect on these species as this could have a substantial effect on their regional populations.

The project will implement measures required by the City Municipal Code and described in Section 1.3 above to protect roosting bats. These include conducting preconstruction surveys for roosting bats, establishing protective buffer zones around active bat roosts, excluding bats from roosts if needed, and developing a bat mitigation plan to compensate for lost roosts of special-status bats (such as the pallid bat). These measures will ensure that project impacts on roosting bats are reduced to less-than-significant levels under CEQA.

6.1.12 Impacts on Sensitive Wildlife due to Increased Lighting (Less than Significant with Mitigation)

The project will result in the construction of new features that will increase the amount of lighting on and around the project site. Lighting from the project would be the result of driveway/road lighting, sport court lighting, and pedestrian lighting. Depending on the location, direction, and intensity of exterior lighting, this lighting can potentially spill into adjacent natural areas, thereby resulting in an increase in lighting compared to existing conditions. Areas to the south and southwest are primarily developed residential areas that do not support sensitive species that might be significantly impacted by illuminance from the project. However, Alameda Creek to the southeast and open space areas to the north and northeast provide suitable habitat for a variety of wildlife species, and are close enough to the project site to be affected by an increase in lighting.

Many animals 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 birds, mammals (Beier 2006), and other taxa as well, 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 indirectly impact mammals and birds by increasing the nocturnal activity of predators like 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 also influence habitat use by rodents (Beier 2006) and by 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.

Wildlife species inhabiting the sensitive habitats to north, northeast, and southeast are already habituated to the existing artificial illuminance from a variety of urban and natural light sources that are found nearby. However, due to the ecological importance of these habitats and the wildlife communities they support, substantial increases in illuminance of these natural areas could result in a potentially significant impact under CEQA by disrupting the natural behaviors of the species using these habitats. Although there is agreement throughout the literature that increases in illuminance can affect wildlife behavior, as described above, there is no quantitative level of illuminance increase (above ambient light) that is agreed upon as a threshold for significant impacts to animals. In our professional opinion, implementation of Mitigation Measure BIO-8 below would reduce this impact to a less-than-significant level under CEQA.

Mitigation Measure BIO-8. Minimize Project Lighting. Due to the potential for lighting on the project site to affect wildlife species that occur on the site and in adjacent natural areas, the project will implement the following measures to minimize lighting on the site.

- All exterior lighting shall be fully shielded to block illumination from shining outward towards open space areas located to the north and northeast, and towards Alameda Creek to the southeast.
- To the maximum extent feasible, up-lighting (i.e., lighting that projects upward above the fixture) shall be avoided in the project design. All lighting shall be fully shielded to block illumination from shining upward above the fixture.
- If up-lighting cannot be avoided in the project design, up-lights shall be shielded and/or directed such that no luminance projects above/beyond objects at which they are directed (e.g., trees) and such that the light would not shine directly into the eyes of a bird flying above the object. If the objects themselves can be used to shield the lights from the sky beyond, no substantial adverse effects on migrating birds are anticipated.
- Fixtures shall comply with lighting zone LZ-1, *Low Ambient*, as recommended by the International Dark-Sky Association (2011) for rural and low-density residential areas as well as preserves in developed areas. The allowed total initial luminaire lumens for the project site is 1.25 lumens per square foot of hardscape, and the BUG rating for individual fixtures shall not exceed B2 or G1, as follows:
 - B2: 1,000 lumens high (60-80 degrees), 2,500 lumens mid (30-60 degrees), 1,000 lumens low (0-30 degrees)
 - G1 (asymmetrical fixtures): 100 lumens forward very high (80–90 degrees), 100 lumens backlight very high (80–90 degrees), 1,800 lumens forward high (60–80 degrees), and 500 lumens backlight high (60–

80 degrees) for asymmetrical fixtures or 1,800 lumens backlight high for quadrilateral symmetrical fixtures.

- In addition, the maximum allowed luminaire lumens (initial lamp lumens for a lamp, multiplied by the number of lamps in the luminaire) for unshielded luminaires at one entry per building is 420 lumens, and for additional unshielded luminaires on the project site is 315 lumens. The maximum allowed luminaire lumens for fully shielded luminaires is 1,260 lumens. Landscape lighting and shielded directional flood lighting are not allowed.
- Exterior lighting shall be minimized (i.e., total outdoor lighting lumens shall be reduced by at least 30% or extinguished, consistent with recommendations from the International Dark-Sky Association [2011]) from 10:00 p.m. until sunrise, except as needed for safety and City code compliance.
- 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 (No Impact)

The CDFW defines sensitive natural communities and vegetation alliances using NatureServe's standard heritage program methodology (Faber-Langendoen et al. 2012), 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.

No riparian habitat or other sensitive natural communities are located on or adjacent to the project site, and thus, there will be no impacts to riparian habitat or other sensitive natural communities as a result of the project. The remnant sycamore woodland on the site is not considered sensitive riparian habitat because no wetland hydrology is associated with this habitat.

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)

Two seasonal wetlands are present on the project site (Figure 3). The project will avoid direct impacts on these wetlands, and Section 6.1.2 describes how water quality within these wetlands will be protected through compliance with standard permit conditions. However, because proposed grading and construction will occur very close to the wetland located in the southern corner of the site, there is some potential for inadvertent impacts to the wetland if construction boundaries are not well-marked. Also, construction of the proposed trail

immediately adjacent to this wetland could affect this wetland's hydrology. Implementation of Mitigation Measure BIO-9 below would reduce this impact to a less-than-significant level under CEQA.

Mitigation Measure BIO-9. Avoid Indirect Impacts to Wetlands. Wetlands to be avoided by the project will be clearly shown on construction plans and protected from construction activities with high-visibility Environmentally Sensitive Area fencing. Where the proposed trail is located immediately adjacent to a mapped wetland, the project will design the trail to minimize impacts on the wetland's hydrology. The trail will be designed to allow overland flow to continue to occur into the wetland area unimpeded, or if the trail is raised, it will be designed such that runoff from the trail surface will drain into the wetland area.

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)

6.4.1 Impacts on Wildlife Movement (Less than Significant)

For many species, the landscape is a mosaic of suitable and unsuitable habitat types. Environmental corridors are segments of land that provide a link between these different habitats while also providing cover. Development that fragments natural habitats (i.e., breaks them into smaller, disjunct pieces) can have a twofold impact on wildlife: first, as habitat patches become smaller they are unable to support as many individuals (patch size); and second, the area between habitat patches may be unsuitable for wildlife species to traverse (connectivity).

The project site is situated on the edge of urban residential development in Fremont. As a result, the proposed project would not result in the fragmentation of natural habitats. While some wildlife species that occur in nearby natural areas may move through the site when traveling through the area, they will continue to be able to move between open space habitats in the hills to the north and east following construction of the proposed project. Thus, any wildlife species that currently move through surrounding open space areas would continue to be able to do so following project construction.

Construction of the project, including the proposed split-rail fencing along Niles Canyon Road, may inhibit the ability of animals to make movements between the creek and natural areas to the northwest. However, many of these animals will be able to pass through and over the split-rail fencing to be constructed on the site, and there are also ample opportunities for animals to cross from natural areas to Alameda Creek immediately northeast of the park along Niles Canyon Road. Thus, the park's changes in land use, including construction of the new split-rail fencing, will not substantially constrain the ability of animals to move between the creek and natural areas to the northwest and northeast.

Thus, the project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and this impact is determined to be less than significant.

6.4.2 Impacts on Nesting Birds (Less than Significant)

Several species of common native birds protected by the MBTA and California Fish and Game Code may nest in trees and shrubs on the project site or in immediately adjacent areas. The removal of vegetation supporting active nests may cause the direct loss of eggs or young, while construction-related activities located near an active nest may cause adults to abandon their eggs or young. This type of impact would not be significant under CEQA, in our opinion, because of the local and regional abundances of the species that could potentially nest on and adjacent to the site and the very low magnitude of the potential impact of development on these species (i.e., the project is expected to impact only a few pairs of these species, which is not a substantial impact on their regional populations). Thus, in our opinion, no mitigation measures are warranted to avoid and minimize project impacts on nesting birds under CEQA.

Nevertheless, several species of common native birds protected by the MBTA and California Fish and Game Code may nest in trees and shrubs on the site or immediately adjacent to the site. The City will implement measures to comply with these laws as described in Section 1.3 above, including avoiding construction during the nesting season, conducting pre-construction surveys prior to the start of work, and implementing protective buffer zones around active nests. With the implementation of these measures, the project will avoid and minimize effects on nesting special-status birds on and adjacent to the project site.

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 Protected Trees (Less than Significant)

The project will remove existing trees on the site, including protected trees as defined by the City (see Section 3.3.1 above), and the City will submit a permit application for tree removal. In accordance with the City's Tree Preservation Ordinance, the project will implement protective measures (including designated protection zones) for any protected tree that will remain in-place during grading and construction activities. In addition, required mitigation for each tree to be removed shall consist of the planting of one 24-inch box replacement tree of a species and in a location approved by the City.

With the incorporation of the above measures to ensure compliance with the City's Tree Preservation Ordinance, any potential impacts related to conflict with local policies or ordinances protecting trees would be less than significant.

6.6 Impacts 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 (No Impact)

The project site is not located within an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the project would not conflict with any such plans.

6.7 Cumulative Impacts (Less than Significant)

Cumulative impacts arise due to the linking of impacts from past, current, and reasonably foreseeable future projects in the region. Future development activities in Fremont will result in impacts on the same habitat types and species that will be affected by the proposed project. The proposed project, in combination with other projects in the area and other activities that impact the species that are affected under the project, could contribute to cumulative effects on special-status species. Other projects in the area include both development and maintenance projects that could adversely affect these species and restoration projects that will benefit these species.

The cumulative impact on biological resources resulting from the project in combination with other projects in the 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; and 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.

However, many projects in the region that impact resources similar to those impacted by the project will be subject to CEQA requirements. It is expected that such projects will mitigate their impacts on sensitive habitats and special-status species through the incorporation of mitigation measures and compliance with permit conditions.

Regardless of the magnitude and significance of cumulative impacts that result from other projects, the Vallejo Mill Historical Park Site Development Plan is not expected to have a substantial effect on biological resources, and would implement the mitigation measure described above to reduce impacts under CEQA to less-thansignificant levels. Thus, provided that this project successfully incorporates the mitigation measures described in this biological resources report, the project will not have a cumulatively considerable contribution to cumulative effects on biological resources.

- Bay Area Puma Project. 2024. Sightings Map. Accessed through February 2024 from <u>https://bapp.org/meet-puma/sightings</u>.
- Beier, P. 2006. Effects of artificial night lighting on mammals. in Rich, C. and T. Longcore, eds. Ecological Consequences of Artificial Night Lighting. Covelo, CA: Island Press. Pp 19-42.
- Calflora. 2024. Calflora: Information on California Plants for Education, Research and Conservation. The Calflora Database, Berkeley, California. Accessed through February 2024 from https://www.calflora.org/.
- [CDFW] California Department of Fish and Wildlife. 2019. Report to the Fish and Game Commission. Evaluation of the petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to list four species of bumble bees as endangered under the California Endangered Species Act. April 4.
- [CDFW] California Department of Fish and Wildlife. 2024. Vegetation Classification and Mapping Program: Natural Communities List. Accessed through February 2024 from <u>https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities</u>.
- [Cal-IPC] California Invasive Plant Council. 2024. California Invasive Plant Inventory Database. Accessed through February 2024 from <u>http://www.cal-ipc.org/paf/.</u>
- [CNPS] California Native Plant Society. 2024. Inventory of Rare and Endangered Plants ronline edition, v8-03 0.39). Accessed February 2024 from <u>http://www.cnps.org/inventory.</u>
- [CNDDB] California Natural Diversity Database. 2024. Rarefind 5.0. California Department of Fish and Wildlife. Accessed through February 2024 from <u>https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data</u>.

Cornell Lab of Ornithology. 2024. eBird. Accessed through February 2024 from http://www.ebird.org/.

- de Molenaar, J. G., M. E. Sanders, and D. A. Jonkers. 2006. Road lighting and grassland birds: local influence of road lighting on a black-tailed godwit population in Rich, C. and T. Longcore, eds. Ecological Consequences of Artificial Night Lighting. Covelo, CA: Island Press. Pp 114-136.
- DeCandido R. and D. Allen. 2006. Nocturnal hunting by peregrine falcons at the Empire State Building, New York City. Wilson J. Ornithol. 118(1): 53-58.

- East-Bay-Birding Sightings List-Serve. 2024. <u>http://groups.io/g/EBB-Sightings/</u>. Accessed through February 2024.
- Faber-Langendoen, D., J. Nichols, L. Master, K. Snow, A. Tomaino, R. Bittman, G. Hammerson, B. Heidel, L. Ramsay, A. Teucher, and B. Young. 2012. NatureServe Conservation Status Assessments: Methodology for Assigning Ranks. NatureServe, Arlington, VA.
- Google Inc. 2024. Google Earth Pro (version 7.3.2.5776) [Software]. Available from earth.google.com.
- International Dark-Sky Association. 2011. Model Lighting Ordinance with User's Guide. Available: <u>https://www.darksky.org/wp-content/uploads/bsk-pdf-manager/16 MLO FINAL JUNE2011.</u> <u>PDF</u>. Accessed February 2024.
- Longcore, T. and C. Rich. 2004. Ecological light pollution. Front. Ecol. Environ. 2(4): 191-198.
- LSA. 2018. Bay Area Ridge Trail Fremont to Garin Biological Resources Assessment. Prepared for the East Bay Regional Parks District. September 2018.
- Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. Condor 108(1): 130-139.
- Negro, J. J., J. Bustamante, C. Melguizo, J. L. Ruiz, and J. M. Grande. 2000. Nocturnal activity of lesser kestrels under artificial lighting conditions in Seville, Spain. J. Raptor Res. 34(4): 327-329.
- [NRCS] Natural Resource Conservation Service. 2024. Web Soil Survey. U.S. Department of Agriculture. Accessed February 2024 from: <u>http://websoilsurvey.nrcs.usda.gov.</u>
- [NWI] National Wetlands Inventory. 2024. Wetlands Mapper. U.S. Fish and Wildlife Service. Accessed February 2024 from <u>https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper</u>.
- PRISM Climate Group. 2024. Online PRISM Data Explorer. Oregon State University, Corvallis, OR. Accessed February 2024 from: <u>http://www.prism.oregonstate.edu/</u>.
- Ringer, R. K. 1972. Effect of light and behavior on nutrition. J. Anim. Sci. 35: 642-647.
- Rogers, D. I., T. Piersma, and C. J. Hassell. 2006. Roost availability may constrain shorebird distribution: Exploring the energetic costs of roosting and disturbance around a tropical bay. Biol. Conserv. 33(4): 225-235.
- Rottenborn, S.C. 2007. Savannah sparrow *Passerculus sandwichensis*. Pages 408–409 in W. G. Bousman, editor. Breeding Bird Atlas of Santa Clara County. Santa Clara Valley Audubon Society, Cupertino, California.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation [online]. Second Edition. California Native Plant Society.

[USFWS] U.S. Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines. 25pp.

Family	Scientific Name	Common Name	Cal-IPC Rank ¹
Anacardiaceae	Schinus molle*	Peruvian pepper tree	Limited
Anacardiaceae	Toxicodendron diversilobum	poison oak	
Araliaceae	Hedera helix*	English ivy	High
Asteraceae	Artemisia douglasiana	mugwort	
	Senecio vulgaris*	common groundsel	
	Baccharis pilularis ssp. consanguinea	coyote brush	
	Carduus pycnocephalus ssp. pycnocephalus*	Italian thistle	Moderate
	Silybum marianum*	milk thistle	Limited
Brassicaceae	Brassica rapa*	field mustard	Limited
	Capsella brusa-pastoris*	shepherd's purse	
	Raphanus sativus*	wild radish	Limited
Cucurbitaceae	Marah fabacean	California man-root	
Cupressaceae	Sequoia sempervirens	coast redwood	
Fabaceae	Genista monspessulana*	French broom	High
	Medicago polymorpha*	variable burclover	Limited
Fagaceae	Quercus agrifolia	coast live oak	
Geraniaceae	Erodium botrys*	long-beaked filaree	
	Geranium molle*	soft geranium	
Lauraceae	Umbellularia californica	California bay	
Lythraceae	Lythrum hyssopifolia*	hyssop-leaf loosestrife	Limited
	Punica granatum*	pomegranate	
Malvaceae	Malva parviflora*	cheeseweed	
Montiaceae	Claytonia parviflora	small-flowered claytonia	
Myrtaceae	Eucalyptus globulus*	blue gum eucalyptus	Moderate
Oleaceae	Ligustrum sp.	privet	
	Olea europaea	European olive	Limited
Oxalidaceae	Oxalis pes-caprae*	Bermuda buttercup	Moderate
Papaveraceae	Eschscholzia californica	California poppy	
Phrymaceae	Diplacus aurantiacus	Orange bush monkeyflower	
Pinaceae	Pinus halepense*	Aleppo pine	ХХ
Platanaceae	Platanus racemosa	western sycamore	
Poaceae	Avena sp.*	wild oat	
	Bromus diandrus*	ripgut brome	Moderate

	Hordeum murinum*	smooth barley	
	Phalaris aquatica*	Harding grass	Moderate
	Poa annua*	annual bluegrass	
Polygonaceae	Rumex crispus*	curly dock	Limited
Rosaceae	Cotoneaster sp.*	cotoneaster	
	Heteromeles arbutifolia	toyon	
	Rubus armeniacus*	Himalayan blackberry	High
	Pyracantha sp.*	firethorn	
	Rubus ursinus	California blackberry	
Sapindaceae	Koelreuteria paniculata*	golden rain tree	
Scrophulariaceae	Scrophularia californica	California figwort	
	Verbascum thapsus*	Woolly mullein	Limited
Simaroubaceae	Ailanthus altissima*	tree of heaven	Moderate
Solanaceae	Solanum nigrum*	black nightshade	
Urticaceae	Urtica urens*	dwarf nettle	
Viburnaceae	Sambucus mexicana	blue elderberry	

¹Cal-IPC Ranks (Cal-IPC 2024):

- Limited These species are invasive, but their ecological impacts are minor on a statewide level. They have low to moderate rates of colonization. Although their distribution is generally limited, these species may be locally persistent and problematic.
- Moderate These species have substantial and apparent—but generally not severe—ecological impacts on the surrounding habitat. They have moderate to high rates of dispersal. Distribution may range from limited to widespread.
- High These species have severe ecological impacts on the surrounding habitat. They have moderate to high rates of dispersal and establishment, and most are widely distributed.

*Nonnative or invasive species

Appendix B. Special-Status Plants Considered but Rejected for Occurrence

Common Name	Scientific Name	No Suitable Habitat	Edaphic Conditions Absent	Outside the Elevation Range	Outside of Known Geographic Range/No Nearby Extant Records
San Mateo thorn-mint	Acanthomintha duttonii		Х		
California androsace	Androsace elongate ssp. acuta				Х
crownscale	Atriplex coronate var. coronata	Х			Х
brittlescale	Atriplex depressa	Х	Х		
lesser saltscale	Atriplex minuscula	Х	Х		Х
alkali milk-vetch	Astragalus tener var. tener	Х		Х	Х
big-scale balsamroot	Balsamorhiza macrolepis		Х		
Oakland star-tulip	Calochortus umbellatus		Х		
Congdon's tarplant	Centromadia parryi ssp. congdonii	Х			
Point Reyes salty bird's-beak	Chloropyron maritimum ssp. palustre	Х		Х	Х
palmate-bracted bird's- beak	Chloropyron palmatum	Х		Х	Х
robust spineflower	Chorizanthe robusta var. robusta	Х		Х	Х
Santa Clara red ribbons	Clarkia concinna ssp. automixa	Х			
small spikerush	Eleocharis parvula	Х	Х		Х
Bay buckwheat	Eriogonum umbellatum var. bahiiforme	Х	Х		
Jepson's woolly sunflower	Eriophyllum jepsonii	Х	Х		
Hoover's button-celery	Eryngium aristulatum var. hooveri			Х	
Jepson's coyote-thistle	Eryngium jepsonii		Х	Х	
stinkbells	Fritillaria agrestis		Х		Х
fragrant fritillary	Fritillaria liliacea		Х		
phlox-leaf serpentine bedstraw	Galium andrewsii ssp. gatense		Х		Х
Loma Prieta hoita	Hoita stobilina	Х			
Santa Cruz tarplant	Holocarpha macradenia		Х		Х
Satan's goldenbrush	lsocoma menziesii var. diabolica	Х			Х
Common Name	Scientific Name	No Suitable Habitat	Edaphic Conditions Absent	Outside the Elevation Range	Outside of Known Geographic Range/No Nearby Extant Records
-------------------------------------	---	---------------------	------------------------------	--------------------------------	---
Contra Costa goldfields	Lasthenia conjugens	Х			Х
Ferris' goldfields	Lasthenia ferrisiae	Х			Х
serpentine leptosiphon	Leptosiphon ambiguus	Х	Х		
bristly leptosiphon	Leptosiphon aureus	Х		Х	
large-flowered leptosiphon	Leptosiphon grandiflorus	Х	Х		
woolly-headed lessingia	Lessingia hololeuca	Х	Х		
elongate copper moss	Mielichhoferia elongata	Х		Х	
woodland woollythreads	Monolopia gracilens		Х	Х	
prostrate vernal pool navarretia	Navarretia prostrata	Х			
Michael's rein orchid	Piperia michaelii	Х			Х
hairless popcornflower	Plagiobothrys glaber	Х			Х
Oregon polemonium	Polemonium carneum	Х			Х
California alkali grass	Puccinellia simplex	Х	Х		
Lobb's aquatic buttercup	Ranunculus lobbii	Х			
chaparral harebell	Ravenella exigua			Х	
chaparral ragwort	Senecio aphanactis	Х	Х		
maple-leaved checkerbloom	Sidalcea malachroides		Х		Х
long-styled sand spurrey	Spergularia macrotheca var. Iongistyla		Х		
most beautiful jewelflower	Streptanthus albidus ssp. peramoenus	Х	Х		
northern slender pondweed	Stuckenia filiformis ssp. alpina	Х	Х		Х
California seablite	Suaeda californica	Х	Х		