

3.9 Biological Resources

This section describes the affected environment and regulatory setting for biological resources related to the Proposed Project. It also describes the potential impacts on biological resources that would result from implementation of the Proposed Project and feasible mitigation measures to reduce the impacts. This section is based on the H.T. Harvey & Associates *Willow Village Master Plan Biological Resources Report* (Master Plan BRA),¹ the *Willow Village Tunnel and North Ramp Biological Resources Assessment* (Tunnel BRA),² and *Willow Village Master Plan Bird-Safe Design Assessment* (Bird Safe Design).³ ICF peer reviewed all reports prepared by H.T. Harvey & Associates. Several subsections below are taken verbatim from the BRAs, while other subsections have been adapted and updated for the environmental impact report (EIR). Unless otherwise noted, the information in this section is cited to the H.T. Harvey & Associates Master Plan BRA, Tunnel BRA, and Bird Safe Design, which are included as Appendix 3.9.

Issues identified in response to the Notice of Preparation (Appendix 1) were considered in preparing this analysis. The applicable issues pertain to native and migratory bird species, the planting of replacement trees, and sensitive natural communities in general.

Existing Conditions

Environmental Setting

The Project Site is within a heavily urbanized area of San Mateo County near San Francisco Bay (Bay). It includes two discrete areas: the main Project Site and Hamilton Avenue Parcels North and South, both of which are north of US 101 in the Bayfront Area of Menlo Park. Offsite areas include the Willow Road Tunnel site (referred to in the Tunnel BRA as the “Willow Village Tunnel and North Ramp Parcels”), located at the intersection of Willow Road and the Dumbarton Rail Corridor, just south of State Route (SR) 84. Additional offsite areas include the Pacific Gas and Electric Company (PG&E) Ravenswood substation and areas for potential intersection improvements that may be included as Project conditions. The main Project Site, the Hamilton Avenue Parcels North and South, and areas for Willow Road Tunnel and the North Ramp Parcels are heavily developed. They have sparse vegetation, consisting mainly of trees and shrubs within landscaped areas. The PG&E Ravenswood substation contains little vegetation. All of these areas are developed and have no natural features that provide habitat for special-status species. Beyond the Project Site, developed/landscaped areas dominate the landscape for miles in each direction.

The Study Area consists of the Project Site (i.e., main Project Site plus Hamilton Avenue Parcels North and South), the offsite Willow Road Tunnel site, and a 100-foot buffer beyond these areas that includes adjacent sensitive habitats that could be affected by the Proposed Project.

¹ H.T. Harvey & Associates. 2022. *Willow Village Master Plan Biological Resources Report*. Los Gatos, CA. Prepared for Peninsula Innovation Partners, Menlo Park, CA. February 24. Unpublished.

² H.T. Harvey & Associates. 2021. *Willow Village Tunnel and North Ramp Biological Resources Assessment*. Los Gatos, CA. Prepared for Signature Development Group, Oakland, CA. July 2. Unpublished.

³ H.T. Harvey & Associates. 2022. *Willow Village Master Plan Bird-Safe Design Assessment*. Los Gatos, CA. Prepared for Peninsula Innovation Partners, Menlo Park, CA. February 24. Unpublished.

Project Site

The approximately 63-acre Project Site, inclusive of the main Project Site and Hamilton Avenue Parcels North and South, is generally bounded by the currently inactive Dumbarton Rail Corridor to the north, an existing life science complex to the east (Menlo Park Labs Campus), the San Francisco Public Utilities Commission's Hetch Hetchy right-of-way and Mid-Peninsula High School to the south, and Willow Road and commercial and residential development in the Belle Haven neighborhood to the west.

A review of historical aerial photographs indicates that the main Project Site was largely an agricultural property until the 1940s. From 1956 to 1996, the main Project Site was developed with numerous buildings and parking lots (i.e., the Menlo Science and Technology Park). Currently, the 59-acre main Project Site is occupied by 20 office, industrial, and warehouse buildings. The Project Site also includes Hamilton Avenue Parcels North and South. Hamilton Avenue Parcel North (consisting of two legal parcels), the approximately 1.8-acre block at the northwest corner of Willow Road and Hamilton Avenue, is currently developed with approximately 16,000 square feet of retail buildings, including the Belle Haven Retail Center and a Jack in the Box restaurant. Hamilton Avenue Parcel South, an approximately 1.3-acre parcel at the southwest corner of Willow Road and Hamilton Avenue, includes a service station with approximately 4,500 square feet of retail space and a car wash.

Elevations within the Project Site range from approximately 6 to 13 feet (North American Vertical Datum of 1988). Soils at the Project Site are classified as Urban Land (urban land-orthents, cut-and-fill complex [0 to 5 percent slopes], and urban land-orthents, reclaimed complex [0 to 2 percent slopes]). This soil type has a variable profile to a depth of approximately 40 inches, with silty clay generally occurring from 40 to 60 inches. It is considered a well-drained soil.⁴ No native soils are present at ground surface on the Project Site. The depth of artificial fill is unknown.

The entire Project Site is occupied by developed/landscaped areas that include office buildings, restaurants, a service station, parking lots, walking paths, mulched and irrigated areas, and extensive plantings that include ornamental trees and other landscape species. The characteristic species of this area include Canary Island pine (*Pinus canariensis*), Chinese pistache (*Pistacia chinensis*), London plane (*Platanus xhispanica*), eucalyptus (*Eucalyptus* sp.), and crepe myrtle (*Lagerstroemia* sp.). Common understory plants include buckbrush (*Ceanothus* sp.) and rosemary (*Rosmarinus officinalis*).

The wildlife species that are most often associated with developed/landscaped areas are those that are tolerant of periodic human disturbances, including introduced species such as the European starling (*Sturnus vulgaris*), rock pigeon (*Columba livia*), house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), and black rat (*Rattus rattus*). Numerous common, native species are also able to use these habitats, especially the landscaped areas, including the western fence lizard (*Sceloporus occidentalis*), striped skunk (*Mephitis mephitis*), and a variety of birds such as the American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), California towhee (*Melospiza crissalis*), bushtit (*Psaltriparus minimus*), chestnut-backed chickadee (*Poecile rufescens*), and California scrub-jay (*Aphelocoma californica*), all of which were observed on the Project Site during the reconnaissance survey by H.T. Harvey & Associates in April 2019. In addition, the eaves of the buildings on the Project Site may be attractive to other nesting or roosting bird species in the area, such as the black phoebe (*Sayornis nigricans*). Furthermore, a number of large eucalyptus trees in the northern portion of the Project Site may provide suitable nesting habitat for raptors, such as the red-tailed hawk (*Buteo jamaicensis*), which was observed during the reconnaissance survey in the Study Area. However, a focused survey of the Study

⁴ Natural Resources Conservation Service. 2021. *Web Soil Survey*. Custom Soil Report. Available: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed: April 8, 2021.

Area detected no evidence (i.e., old nests) of raptors having previously nested on the Project Site. Similarly, an examination of trees and structures on the Project Site failed to find any large cavities that might provide suitable bat roosting habitat. Therefore, large roosting or maternity colonies of bats are not expected to occur in the Study Area.

California annual grassland habitat occurs along the Dumbarton Rail Corridor, primarily outside the Project Site. However, a very small area encroaches on the northeast corner of the Project Site. This habitat is dominated by non-native grasses and forbs such as wild oat (*Avena* sp.), fennel (*Foeniculum vulgare*), bull mallow (*Malva nicaeensis*), black mustard (*Brassica nigra*), and bristly ox-tongue (*Helminthotheca echinoides*). Many of these non-native plant species are ranked as moderately or highly invasive by the California Invasive Plant Council. For example, fennel is highly invasive and has severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Moderately invasive species, such as wild oats and black mustard, have substantial and apparent ecological impacts.

Wildlife use of California annual grasslands in the Study Area is limited by frequent human disturbance, the abundance of non-native and invasive species, and isolation of the grassland habitat remnants from more extensive grasslands. As a result, wildlife species associated with more extensive grasslands are absent from the small patches of grasslands in this area. Most of the bird species using this habitat during the breeding season nest in nearby landscaped habitats, using the California annual grassland only for foraging. Few species of reptiles and amphibians occur in the California annual grassland in the Study Area because of its disturbed nature and low level of habitat heterogeneity. Nevertheless, reptiles such as the western fence lizard and gopher snake (*Pituophis melanoleucus*) occur in this type of habitat, and amphibians such as the Sierran chorus frog (*Pseudacris sierra*) and western toad (*Anaxyrus boreas*), which breed in freshwater marshes in the area, forage in this habitat. The small mammals expected to be present include the native western harvest mouse (*Reithrodontomys megalotis*) and non-native house mouse, Norway rat, and black rat. Small burrowing mammals, such as the Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Spermophilus beecheyi*), are also present. Larger mammals, such as the striped skunk, Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and black-tailed jackrabbit (*Lepus californicus*), are also likely to occur here.

The Project Site does not support wetland or aquatic habitat. A small, isolated segment of forested wetland that may be claimed as waters of the United States is located in a drainage ditch along the northern edge of the main Project Site. Similarly, a linear area of herbaceous-dominated seasonal wetland is located in the Dumbarton Rail Corridor, immediately north of the Hamilton Avenue Parcels North and South. Another herbaceous seasonal wetland is located outside the northeast corner of the main Project Site. Immediately outside the southern edge of the main Project Site, but within an area where offsite improvements would be made, is a ditch. Its location is partially within the Hetch Hetchy easement area. This ditch, which is concrete lined in some locations, is dominated by upland (i.e., non-wetland) vegetation. The ditch collects water from the surrounding uplands; this water flows into a storm drain.

Outside the Project Site, developed lands associated with existing commercial land uses are present. North of the main Project Site, beyond the inactive Dumbarton Rail Corridor, is a storage facility. A large brackish marsh is present north of the storage area as well as both north and south of the old rail line but farther to the north and northeast. This marsh, which contains several channels and extends north to SR 84 and east to University Avenue, is dominated by salt marsh and brackish marsh plants. Farther to the north and northeast are former salt ponds, now managed as waterbird habitat associated with Don Edwards San Francisco Bay National Wildlife Refuge (Refuge) and the waters and marshes of the Bay.

Willow Road Tunnel Site

The offsite Willow Road Tunnel site is surrounded by dense commercial and residential development in Menlo Park. The site is generally bordered by SR 84 to the north, commercial development and a large brackish marsh to the east, and commercial development to the west and south. The Willow Road Tunnel site is bisected by Willow Road, which is oriented north to south, and the Dumbarton Rail Corridor, which is oriented east to west.

Elevations on the Willow Road Tunnel site range from approximately 6.1 to 12.9 feet above sea level (North American Vertical Datum of 1988). The Natural Resources Conservation Service has mapped two soil units on the Willow Road Tunnel site: urban land-orthents, reclaimed complex (0 to 2 percent slopes), and Novato clay (0 to 1 percent slopes). In soil taxonomy, orthents are defined as young soils that lack horizon development because of either steep slopes or parent materials that lack weatherable minerals. Typically, these are very shallow soils. Novato clay soils are deep, poorly drained soils that form in alluvium deposits along bay margins.

There are two habitat/land use types on the Willow Road Tunnel site: developed/landscaped and ruderal grassland. West of Willow Road, developed portions of the Willow Road Tunnel site consist of paved pedestrian pathways and vehicle roadways with surrounding areas of landscape vegetation. Landscape trees within these areas include native coast live oak (*Quercus agrifolia*) and non-native Monterey cypress (*Hesperocyparis macrocarpa*), ginkgo (*Ginkgo biloba*), and desert willow (*Chilopsis linearis*). Landscape plants within these areas include native California fuchsia (*Epilobium canum*) and non-native trumpet vine (*Vampsis radicans*), ceanothus (*Ceanothus* sp.), and deer grass (*Muhlenbergia rigens*). East of Willow Road, developed portions of the Willow Road Tunnel site are located entirely within a paved parking area.

Ruderal grassland habitat occurs within the portion of the Willow Road Tunnel site that falls along the Dumbarton Rail Corridor. At the time of the June 2021 survey by H.T. Harvey & Associates, this habitat had been recently mown. This habitat is dominated by non-native grasses and forbs such as wild oat (*Avena* sp.), fennel (*Foeniculum vulgare*), bull mallow (*Malva nicaeensis*), black mustard (*Brassica nigra*), and bristly ox-tongue (*Helminthotheca echioides*). Many of these plant species are ranked as moderately or highly invasive by the California Invasive Plant Council.

The developed/landscaped habitat on the Willow Road Tunnel site provides nesting and foraging opportunities for some urban-adapted species of birds. Bird species that occur in these areas include the native Anna's hummingbird (*Calypte anna*), house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), and American crow (*Corvus brachyrhynchos*). These species may use the trees or ground vegetation on the site for nesting. No nests of raptors (e.g., hawks, owls, and falcons) were observed on the Willow Road Tunnel site or in immediately adjacent areas during the reconnaissance-level survey, although larger trees on the site provide suitable nesting habitat for raptors such as the Cooper's hawk (*Accipiter cooperii*).

Common urban-adapted mammal species that may occur in developed areas of the Willow Road Tunnel site include the native raccoon (*Procyon lotor*) and non-native house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), black rat (*Rattus rattus*), and eastern gray squirrel (*Sciurus carolinensis*). In addition, small numbers of burrows for California ground squirrels (*Otospermophilus beecheyi*) and Botta's pocket gophers (*Thomomys bottae*) were observed within landscaped areas west of Willow Road.

Wildlife use of ruderal grassland habitat on the Willow Road Tunnel site is limited by frequent human disturbance, the abundance of non-native and invasive species, and isolation of this habitat from more extensive grasslands in the region. The majority of bird species that use the grasslands on the Willow Road Tunnel site inhabit nearby developed/landscaped areas and use grasslands primarily for foraging. Such species include mourning dove (*Zenaida macroura*), lesser goldfinch, dark-eyed junco, American crow,

and Brewer's blackbird (*Euphagus cyanocephalus*). Several other species of birds use the ruderal grassland habitat during the nonbreeding season. These include golden-crowned sparrow (*Zonotrichia atricapilla*), savannah sparrow (*Passerculus sandwichensis*), and white-crowned sparrow (*Zonotrichia leucophrys*), all of which forage on the ground or in herbaceous vegetation, primarily for seeds. Reptiles such as the western fence lizard (*Sceloporus occidentalis*) and gopher snake (*Pituophis melanoleucus*) also occur in this type of habitat.

Offsite Improvements

Construction on offsite areas could include the placement of utilities lines under existing rights-of-way, construction of a roundabout, and improvements to a PG&E substation. All of these areas are developed and have no natural features that provide habitat for special-status species.

Wetlands and Non-Wetland Waters of the United States

There are no wetlands or non-wetland waters of the United States or waters of the state that would be subject to U.S. Army Corps of Engineers (USACE) or Regional Water Quality Control Board (RWQCB) jurisdiction on the main Project Site, Hamilton Avenue Parcels North and South, the Willow Road Tunnel site, or the PG&E Ravenswood substation site. However, a small, isolated⁵ segment of forested wetland occurs in a drainage ditch just outside the northern edge of the main Project Site. This segment of the ditch is characterized by a dense overstory of willow (*Salix* sp.), with minimal groundcover, consisting predominantly of tall flatsedge (*Cyperus eragrostis*) and poison oak (*Toxicodendron diversilobum*). The wetland hydrology at this forested wetland is supported by localized freshwater runoff from the surrounding area, which pools on or saturates the soils in the lowest portion of the drainage ditch during the wet season.

A herbaceous seasonal wetland is located offsite within the Dumbarton Rail Corridor between Willow Road and Chilco Street in the extreme northwestern part of the Study Area, entirely outside the Project Site. Another herbaceous seasonal wetland is located just off the northeast corner of the Project Site. These wetlands are characterized by slight depressions. The northwestern herbaceous seasonal wetland is dominated by Italian rye grass (*Festuca perenne*), Bermuda grass (*Cynodon dactylon*), and bird's foot trefoil (*Lotus corniculatus*), along with obligate species such as narrow-leaved cattail (*Typha angustifolia*) and chairmaker's bulrush (*Schoenoplectus americanus*) scattered throughout the feature. The northeastern herbaceous seasonal wetland is dominated by narrow-leaved cattail, with saltmarsh baccharis (*Baccharis glutinosa*) and dallis grass (*Paspalum dilatatum*) also present. Freshwater hydrology in this area is most likely a result of localized runoff and possibly groundwater upwelling that reaches the root zone but does not typically cause inundation.

At the time of the H.T. Harvey & Associates reconnaissance survey in 2019 and a site visit for a wetland delineation in August 2021, no ponding water or saturated soil was observed in the herbaceous seasonal wetlands, but soils were saturated to approximately 6 inches below the ground's surface. In addition, a review of historical aerial imagery indicates that the wetlands do not typically contain ponded water for any significant length of time. The herbaceous seasonal wetlands in the Study Area provide only marginal habitat for most wildlife species because of their limited extent and the limited depth and duration of ponding, if they even support ponding at all. Wildlife diversity is expected to be low. However, many of the same bird species described in the developed/landscaped and California annual grassland habitats above may forage in herbaceous seasonal wetlands. These species include dark-eyed junco, white-crowned sparrow, and California towhee.

⁵ This feature is considered isolated because it is in a depression surrounded by upland areas and lacks a surface hydrologic connection to areas that are more clearly considered jurisdictional waters of the United States.

The ditch outside the southern edge of the main Project Site and partially within the Hetch Hetchy right-of-way provides no aquatic habitat; therefore, no aquatic or wetland wildlife species are associated with this feature.

A large brackish marsh is located approximately 215 feet northeast of the Willow Road Tunnel site, north of the Dumbarton Rail Corridor and east of Willow Road. This brackish marsh, which extends north to SR 84 and east to University Avenue and contains several channels, is dominated by salt marsh and brackish marsh plants. As a result, marsh-associated wildlife species such as the San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), Alameda song sparrow (*Melospiza melodia pusillula*), northern harrier (*Circus hudsonius*), and possibly the salt marsh harvest mouse (*Reithrodontomys raviventris*) may occur in the brackish marsh.

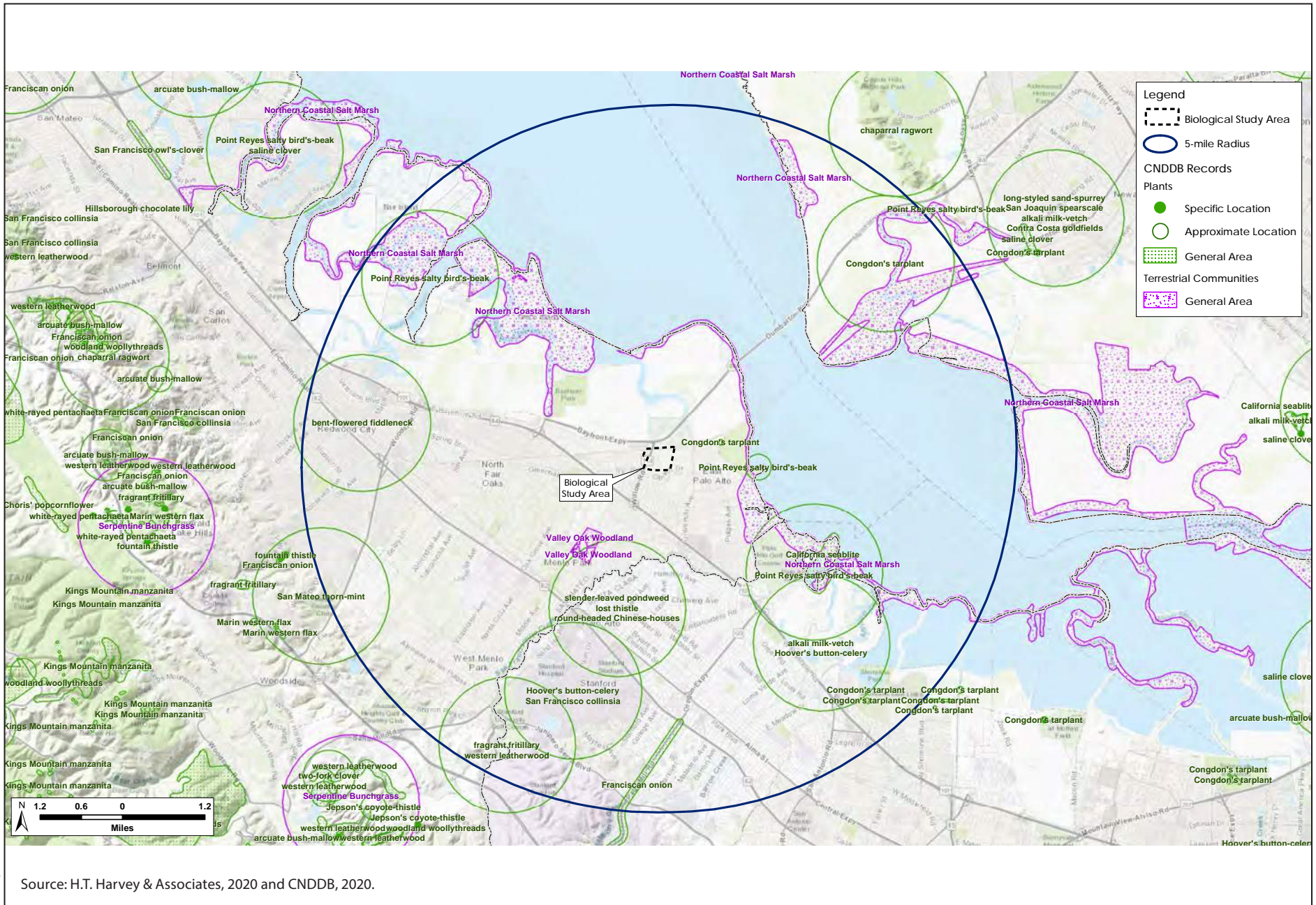
Special-Status Species

The California Environmental Quality Act (CEQA) requires an assessment of the effects of a project on species that are protected and considered “threatened, rare, or endangered.” Such species are typically described as “special-status species.” For the purpose of environmental review of the Proposed Project, special-status species have been defined as described below. Information concerning threatened, endangered, and other special-status species was collected from several sources and reviewed by H. T. Harvey & Associates biologists, as summarized in the BRA. Figure 3.9-1, Special-Status Plant Species, depicts the California Department of Fish and Wildlife’s (CDFW’s) California Natural Diversity Database (CNDDDB) records of special-status plant species in the general vicinity of the Project Site. Figure 3.9-2, Special-Status Animal Species, depicts CNDDDB records of special-status animal species. These generalized maps show areas where special-status species are known to occur or have occurred historically.

Special-Status Plant Species

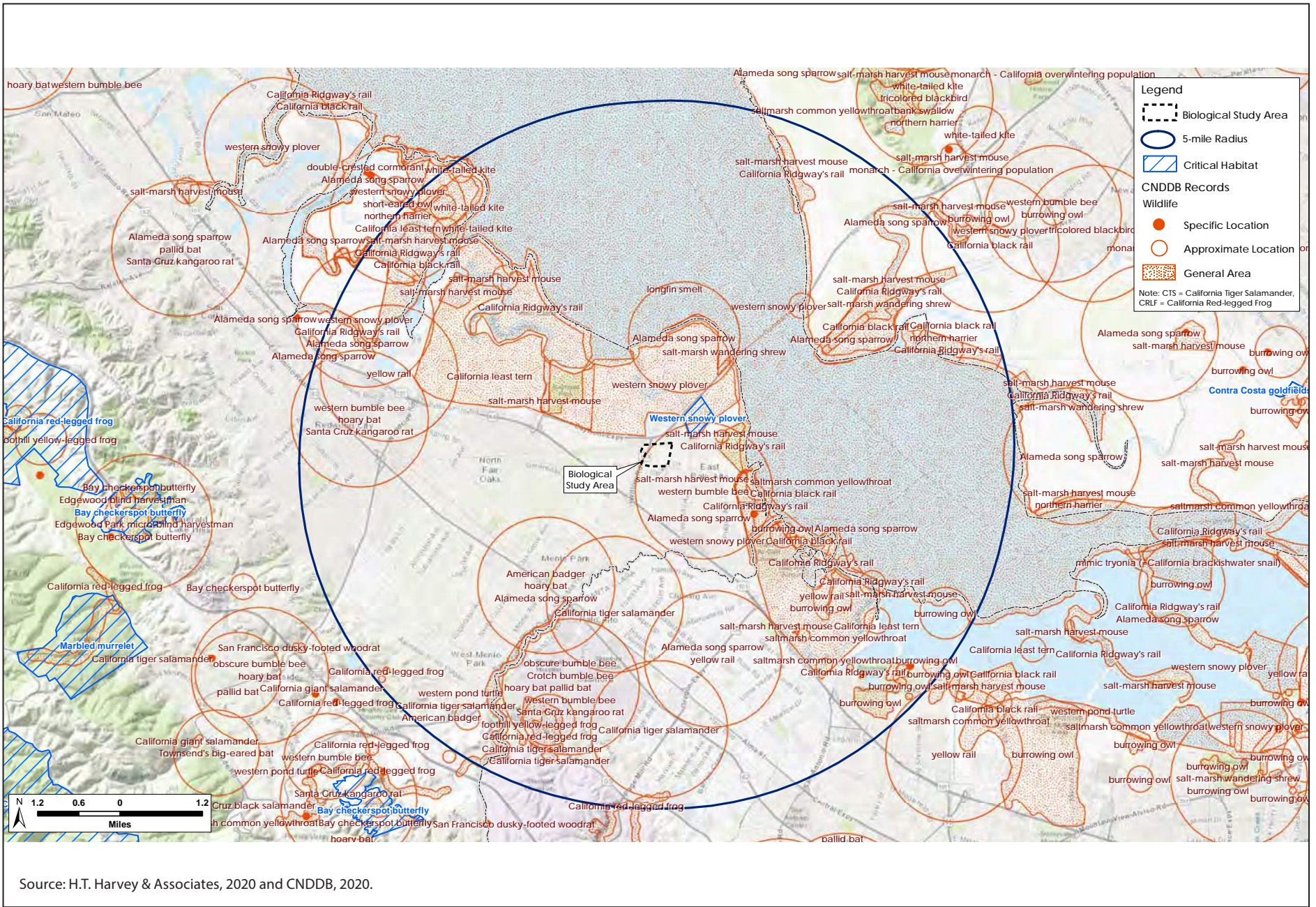
For purposes of this analysis, “special-status” plants are considered plant species that are:

- Listed under the federal Endangered Species Act (ESA) as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under the California Endangered Species Act (CESA) as threatened, endangered, rare, or a candidate species.
- Listed by the California Native Plant Society (CNPS) as California Rare Plant Rank (CRPR) 1A, 1B, 2, 3, or 4. CNPS rankings are as follows:
 - 1A = Plants presumed extirpated in California and either rare or extinct elsewhere.
 - 1B = Plants that are rare, threatened, or endangered in California and elsewhere.
 - 2A = Plants that are presumed extirpated in California but common elsewhere.
 - 2B = Plants that are rare, threatened, or endangered in California but more common elsewhere.
 - 3 = Plants about which more information is needed.
 - 4 = Plants of limited distribution (i.e., a watch list species).



Source: H.T. Harvey & Associates, 2020 and CNDDDB, 2020.

Figure 3.9-1
Special Status Plant Species



Legend

- Biological Study Area
- 5-mile Radius
- Critical Habitat

CNDDDB Records

Wildlife

- Specific Location
- Approximate Location
- General Area

Note: CTS = California Tiger Salamander, CRLF = California Red-legged Frog

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**Figure 3.9-2
Special Status Animal Species**

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

- .1 = Species that are seriously endangered in California.
- .2 = Species that are fairly endangered in California.
- .3 = Species that are not very endangered in California.

The CNPS⁶ and CNDDDB⁷ identify 89 special-status plant species as potentially occurring in at least one of the nine U.S. Geological Survey (USGS) quadrangles containing or surrounding the Study Area, which includes the Willow Road Tunnel site. These are CRPR 1 or 2 species or, in San Mateo County, CRPR 3 or 4 species. Of those potentially occurring special-status plant species, 88 were determined to be absent from the Study Area for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) an elevation range that is outside the range of the species; or (4) a determination that the species is extirpated from the Project Vicinity. For purposes of this section, the term *Project Vicinity* encompasses the 5-mile radius surrounding the Project Site.

Appendix B of the BRA (Appendix 3.9) lists the plants that were determined absent, along with the basis for the determination. Suitable habitats, edaphic requirements, and elevation ranges were determined to be present in the Study Area for one plant species, Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), which can persist in disturbed grasslands and has been documented by the CNDDDB in the Project Vicinity (Figure 3.9-1).

Although no suitable habitat occurs on the main Project Site or Hamilton Avenue Parcels North and South, there is suitable habitat for Congdon's tarplant within the Study Area (i.e., in the California annual grassland along the old rail line immediately north of the Project Site). If present on the Project Site or Hamilton Avenue Parcels North and South, this species should have been flowering and detectable during the H.T. Harvey & Associates reconnaissance survey in November 2017. Although a focused survey for the species was conducted within the Dumbarton Rail Corridor on June 12, 2020,⁸ no individuals of this species were observed. In addition, there is potentially suitable habitat for Congdon's tarplant on the Willow Road Tunnel site, within the small area of ruderal grassland habitat along the Dumbarton Rail Corridor. However, a focused survey for Congdon's tarplant was conducted within this area on June 12, 2020, and no individuals of this species were observed. Therefore, there are no special-status plant species within the Study Area.

Special-Status Animal Species

For purposes of this analysis, "special-status" animals are considered species that are:

- Listed under the ESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under the CESA as threatened, endangered, or a candidate threatened or endangered species.

⁶ California Native Plant Society. 2021. *Inventory of Rare and Endangered Plants* (7.0 and 9.0 online editions). Available: <http://www.cnps.org/inventory>. Accessed: March 15, 2022.

⁷ California Department of Fish and Wildlife. 2021. *California Natural Diversity Database*. RareFind 5.0. Available: <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>. Accessed: March 15, 2022.

⁸ On June 10, 2020, Congdon's tarplant was documented as flowering at Sunnyvale Baylands Park, which is 9.4 miles southeast of the Study Area. Therefore, because this species was documented on June 10, 2020, as flowering at a site that was relatively close to the Study Area, but not on the Project Site, this species should have been detectable at the time of the June 12, 2020, site visit.

- Designated by CDFW as a California Species of Special Concern.
- Listed in the California Fish and Game Code as a 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).

The protected special-status animal species that are known to occur, or potentially occur, in the region, as well as information regarding likelihood of occurrence in the Study Area, is presented in Table 3.9-1. Most of the special-status species listed in Table 3.9-1 are not expected to occur in the Study Area because it lacks suitable habitat, is outside the known range of the species, or is isolated from the nearest known extant populations by development or otherwise unsuitable habitat. For these reasons, the special-status animal species that are not expected to occur on the main Project Site, Hamilton Avenue Parcels North and South, the Willow Road Tunnel site, PG&E Ravenswood substation site, and in areas for potential intersection improvements include the Crotch bumble bee (*Bombus crotchii*), western bumble bee (*Bombus occidentalis*), green sturgeon (*Acipenser medirostris*), Central California coast steelhead (*Oncorhynchus mykiss*), California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), western pond turtle (*Actinemys marmorata*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), California Ridgway's rail (*Rallus obsoletus obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), western snowy plover (*Charadrius alexandrinus nivosus*), California least tern (*Sterna antillarum browni*), black skimmer (*Rynchops niger*), burrowing owl (*Athene cunicularia*), northern harrier, loggerhead shrike (*Lanius ludovicianus*), salt marsh harvest mouse, salt marsh wandering shrew (*Sorex vagrans halicoetes*) and American badger (*Taxidea taxus*). Some of these species, such as the northern harrier, loggerhead shrike, white-tailed kite (*Elanus leucurus*), salt marsh harvest mouse, and salt marsh wandering shrew, may occur in wetland habitats near but outside, to the north and northeast, the main Project Site, Hamilton Avenue Parcels North and South, or the Willow Road Tunnel site. However, they are absent from these areas because there is no suitable habitat present and the species are separated from the Project Site by dense urban development and SR 84. Furthermore, the proposed development footprint is well removed from suitable habitat for these species. Several other special-status species have some potential to occur in the Study Area as visitors, migrants, or transients but are not expected to reside or breed on the Project Site, occur in large numbers, or otherwise make substantial use of the Project Site. These include the San Francisco common yellowthroat, Alameda song sparrow, and pallid bat (*Antrozous pallidus*).

During the reconnaissance survey conducted by H.T. Harvey & Associates on November 13, 2017, multiple feral cats (*Felis catus*) were observed on the main Project Site and in the surrounding Study Area. Mammalian predation of birds and small mammals, including special-status species, is a natural process. However, when natural levels of predation increase because of the presence of non-native species, the health of local animal populations, including populations of special-status species, can be adversely affected. Feral cats have been implicated as a major predator for many native wildlife species, including birds and small mammals such as the salt marsh harvest mouse, which is known to occur in wetlands north and northeast of the Study Area. Not only does predation by feral cats represent a potential impact on animal populations, but feral cat feeding stations attract other predators, such as raccoons and skunks, thereby increasing predation pressure on native species in these locations.

Table 3.9-1. Special-Status Animal Species Known to Occur or Having Potential to Occur in the Project Vicinity

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Project Vicinity
Federal or State Endangered, Rare, or Threatened Species			
Crotch bumble bee (<i>Bombus crotchii</i>)	SC	Occurs in open grassland and scrub habitats. Like most other species of bumble bees, nests primarily underground (Williams et al. 2014). Generalist foragers that visit a variety of floral resources.	Absent. There is one historical record of the species approximately 4 miles southwest of the Project Site (CNDDDB 2020), but there are no recent records in the vicinity. Although the species was historically found throughout the southern two-thirds of California, it now appears to be absent from most of its former range (Xerces Society 2018). It is not currently, or recently, known from the Study Area and not expected to occur because of recent range contractions.
Western bumble bee (<i>Bombus occidentalis occidentalis</i>)	SC	Occurs in meadows and grasslands with abundant floral resources. Nests are primarily underground.	Absent. There are several records of this species from the Project Vicinity, but all records are historical (CNDDDB 2020). Although this species was historically found throughout much of central and Northern California, it is now confined to high-elevation sites and a small number of records on the Northern California coast (Xerces Society 2018). It is not expected to occur in the Study Area because of recent range contractions.
Green sturgeon (<i>Acipenser medirostris</i>)	FT, CSSC	Spawns in large river systems such as the Sacramento River; forages in nearshore oceanic waters, bays, and estuaries.	Absent. No suitable aquatic habitat is present in the Study Area. Green sturgeon may forage infrequently and in low numbers in the open Bay, which is 1.5 miles north and east of the Project Site; however, there is no aquatic connection between the Bay and the Project Site.
Central California Coast steelhead (<i>Oncorhynchus mykiss</i>)	FT	Cool streams with suitable spawning habitat and conditions that allow migration between spawning and marine habitats.	Absent. No suitable aquatic habitat is present in the Study Area. Steelhead may forage in the open Bay, which is 1.5 miles north and east of the Project Site; however, there is no aquatic connection between the Bay and the Project Site.
California tiger salamander (<i>Ambystoma californiense</i>)	FT, ST	Vernal or temporary pools in annual grasslands or open woodlands.	Absent. No suitable habitat is present in the surrounding Study Area. Furthermore, populations have largely been extirpated from San Mateo County because of habitat loss; the species is now considered absent from the majority of the Project Vicinity, including the Study Area. The closest occurrence in the Project Vicinity is at Lake Lagunita on the Stanford campus, which is 4 miles south of the Study Area (CNDDDB 2020).

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Project Vicinity
San Francisco garter snake (<i>Thamnophis sirtalis tetrataenia</i>)	FE, SE	Prefers densely vegetated freshwater habitats. May use upland burrows for aestivation.	Absent. No suitable habitat is present in the Study Area. Furthermore, the Project Vicinity is outside the known range of the species.
California red-legged frog (<i>Rana draytonii</i>)	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	Absent. No suitable habitat is present in the Study Area. Furthermore, this species has been extirpated from the majority of the Project Vicinity because of development, the alteration of hydrology within its aquatic habitats, and the introduction of non-native predators such as non-native fish and bullfrogs (<i>Lithobates catesbeianus</i>). The most recent record of the species in the Project Vicinity is from 2016 near Bear Gulch Reservoir, more than 4.8 miles southwest of the Study Area (CNDDDB 2020).
California Ridgway’s rail (<i>Rallus obsoletus obsoletus</i>)	FE, SE, SP	Salt marshes characterized by large expanses of saltmarsh cordgrass (<i>Spartina</i> spp.) or pickleweed (<i>Salicornia</i> spp.), with well-developed tidal channels.	Absent. Although the species is known to occur in the Palo Alto Baylands and Ravenswood Open Space Preserve, 1 mile east of the Study Area, as well as Greco Island, 1 mile northwest of the Study Area, no salt marsh habitat is present in the Study Area. Furthermore, the only marsh habitat within 700 feet of the main Project Site that is equivalent in size to the non-disturbance buffer typically required around active nests by the U.S. Fish and Wildlife Service and CDFW is a mosaic of both freshwater and salt marsh habitats in areas north of the Study Area. This marsh habitat lacks extensive patches of cordgrass or pickleweed, as well as tidally influenced braided channels, and therefore is not considered suitable habitat for California Ridgway’s rail within the Study Area.
California black rail (<i>Laterallus jamaicensis coturniculus</i>)	ST, SP	Breeds in fresh, brackish, and tidal salt marshes.	Absent. This species occurs in the Project region, primarily as a scarce winter visitor; individuals have been recently recorded at a slough 0.5 mile north of the Study Area (CNDDDB 2020). However, no suitable nesting or foraging habitat for California black rail is present in the Study Area.
Western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	FT, CSSC	Sandy beaches on marine and estuarine shores and salt pannes in the Bay’s saline-managed ponds.	Absent. Although western snowy plovers are known to nest in the salt panne habitat located in the Refuge’s Ravenswood complex (CNDDDB 2020), no suitable nesting or foraging habitat is present in the Study Area.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Project Vicinity
California least tern (<i>Sternula antillarum browni</i>)	FE, SE, SP	Nests along the coast on bare or sparsely vegetated, flat substrates. In the South Bay, nests in salt pannes and on an old airport runway. Forages for fish in open waters.	Absent. Suitable nesting habitat for California least tern is not present in the Study Area. Least terns have been recorded in the Project Vicinity during the post-breeding season and have been known to forage in the Redwood City salt ponds 2.5 miles west of the Study Area (CNDDDB 2020). Least terns have also been known to forage infrequently along the shores of the Palo Alto Baylands Preserve, located 3 miles southeast of the Study Area. However, least terns are not expected to forage in the Study Area because of the lack of open water habitat that would support fish.
Salt marsh harvest mouse (<i>Reithrodontomys raviventris</i>)	FE, SE, SP	Salt marsh habitat dominated by common pickleweed or alkali bulrush.	Absent. The species has been recorded in salt marsh habitat in the Project Vicinity, including on the Refuge north and east of the site (CNDDDB 2020). Suitable pickleweed/alkali bulrush-dominated salt marsh habitat is present within several hundred feet of the Study Area (to the northeast). However, no suitable habitat is present in the Study Area.
California Species of Concern			
Western pond turtle (<i>Actinemys marmorata</i>)	CSSC	Permanent or nearly permanent water in a variety of habitats.	Absent. No suitable aquatic habitat is present in the Study Area.
Northern harrier (<i>Circus cyaneus</i>)	CSSC (nesting)	Nests in marshes and moist fields; forages over open areas.	Absent. Northern harriers nest and forage in the wetlands immediately north and northeast of the Study Area, but they are not expected to nest or forage in the Study Area because of a lack of suitable habitat.
Black skimmer (<i>Rynchops niger</i>)	CSSC (nesting)	Nests on sparsely vegetated beaches, isolated islands, and levees.	Absent. No suitable nesting or foraging habitat is present in or near the Study Area.
Burrowing owl (<i>Athene cucularia</i>)	CSSC	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels (<i>Spermophilus beecheyi</i>).	Absent. No nesting burrowing owls are known to occur in the surrounding Project Vicinity (CNDDDB 2020), and no suitable burrowing owl roosting or nesting habitat (i.e., open grasslands with ground squirrel burrows) is present in the Study Area. The narrow strip of California annual grassland at the northern edge of the Study Area is too limited and too hemmed in by trees and development to provide good burrowing owl habitat. Therefore, the species is not expected to occur in the Study Area.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Project Vicinity
Loggerhead shrike (<i>Lanius ludovicianus</i>)	CSSC (nesting)	Nests in tall shrubs and dense trees; forages in grasslands, marshes, and ruderal habitats.	Absent. No suitable breeding habitat is present in the Study Area, and the California annual grasslands in the Study Area are not extensive enough to provide suitable foraging habitat.
San Francisco common yellowthroat (<i>Geothlypis trichas sinuosa</i>)	CSSC	Nests in herbaceous vegetation, usually in wetlands or moist floodplains.	Absent as Breeder. The San Francisco common yellowthroat breeds in wetlands immediately north and northeast of the Study Area, but no suitable breeding habitat is present in the Study Area itself. Small numbers may occasionally forage along the northern edge of the Study Area.
Alameda song sparrow (<i>Melospiza melodia pusillula</i>)	CSSC	Nests in salt marsh, primarily in marsh gumplant and cordgrass along channels.	Absent as Breeder. Song sparrows breed commonly in wetlands immediately north and northeast of the Study Area, but no suitable breeding habitat is present in the Study Area itself. Small numbers may occasionally forage along the northern edge of the Study Area.
Salt marsh wandering shrew (<i>Sorex vagrans halicoetes</i>)	CSSC	Medium to high marsh 6 to 8 feet above sea level with abundant driftwood and common pickleweed.	Absent. Suitable pickleweed-dominated salt marsh habitat is present within several hundred feet of the Study Area (to the northwest). However, no suitable habitat is present
Pallid bat (<i>Antrozous pallidus</i>)	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	Absent as Breeder. Historically, pallid bats were very likely present in a number of locations throughout the Project region, but their populations have declined in recent decades. This species has been extirpated as a breeder from urban areas close to the Bay, as is the case in the Study Area. No suitable roosting habitat is present, and no known maternity colonies are present on or adjacent to the Study Area. There is low probability for the species occurring in the Project Vicinity at all because of urbanization; however, individuals from more remote colonies could forage over the Study Area on rare occasions.
American badger (<i>Taxidea taxus</i>)	CSSC	Burrows in grasslands and occasionally in infrequently disked agricultural areas.	Absent. Badgers are not known to occur in the Project region because of the lack of extensive grasslands and agricultural areas with the friable soils needed for digging burrows. No suitable habitat is present.
White-tailed kite (<i>Elanus leucurus</i>)	SP	Nests in trees; forages in extensive grasslands or marshes.	Absent. No suitable breeding habitat is present in the Study Area, and the California annual grasslands in the Study Area are not extensive enough to provide suitable foraging habitat. May nest north and northeast of the Study Area but determined to be absent from the Study Area.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Project Vicinity
Sources: California Department of Fish and Wildlife. 2020. <i>California Natural Diversity Database</i> .			
H.T. Harvey & Associates. 2021. <i>Willow Village Master Plan Biological Resources Report</i> (see Table 1 in Appendix 3.9).			
H.T. Harvey & Associates. 2021. <i>Willow Village Tunnel and North Ramp Biological Resources Assessment</i> .			
Xerces Society. 2018. R. Hatfield, S. Jepsen, S.F. Jordan, M. Blackburn, and A. Code. <i>Petition to the State of California Fish and Game Commission to List the Crotch Bumble Bee (Bombus crotchii), Franklin's Bumble Bee (Bombus franklini), Suckley Cuckoo Bumble Bee (Bombus suckleyi), and Western Bumble Bee (Bombus occidentalis) as Endangered under the California Endangered Species Act</i> . Portland, OR. October 16.			
Notes:			
Special-Status Species Code Designations			
FE	=	Federally Listed as Endangered	
FT	=	Federally Listed as Threatened	
SE	=	State Listed as Endangered	
ST	=	State Listed as Threatened	
SC	=	State Candidate for Listing	
CSSC	=	California Species of Special Concern	
SP	=	State Fully Protected Species	

Sensitive Natural Communities and Habitats

A query of sensitive habitats in the CNDDDB RareFind database by H.T. Harvey & Associates identified three sensitive habitats as occurring within the nine USGS quadrangles containing or surrounding the Study Area: serpentine bunchgrass grassland, valley oak woodland, and northern coastal salt marsh. Serpentine bunchgrass occurs only on serpentine soils, which do not occur in the vicinity of the Project Site. Valley oak woodland is characterized by valley oak (*Quercus lobata*), which is the dominant or co-dominant species in the tree canopy. Although some valley oak individuals do occur in the vicinity of the Project Site, they are ornamental plantings along buildings and roadways and therefore do not constitute this sensitive habitat type. The last sensitive habitat type, northern coastal salt marsh, occurs along sheltered inland margins of bays that are often co-dominated by pickleweed (*Salicornia spp.*), cordgrass (*Spartina spp.*), and sometimes saltgrass (*Distichlis spicata*). None of these species was noted in the vicinity of the Project Site; therefore, this habitat type is also absent.

As described above, the H.T. Harvey & Associates surveys and delineation of regulated habitats did not identify any wetlands or other waters that fall under the jurisdiction of USACE (i.e., waters of the United States) or the RWQCB or CDFW (i.e., waters of the state) on the Project Site itself. A small, isolated segment of forested wetland that could be considered part of waters of the state is located in a drainage ditch along the northern edge of the Study Area, just outside the boundary for the Proposed Project. One linear area of herbaceous seasonal wetland is immediately north of Hamilton Avenue Parcels North and South. Another herbaceous seasonal wetland is just outside the northeast corner of the Project Site. USACE may claim these features as jurisdictional waters of the United States. Furthermore, the RWQCB could consider these wetlands (and possibly an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) to be waters of the state.

Under the Navigable Waters Protection Rule (NWPR) (85 *Federal Register* 22250), which excluded ephemeral features, including ephemeral streams, swales, gullies, rills and pools, ditches, and isolated wetlands (i.e., wetlands that do not abut, are separated by more than a natural berm from, are not inundated by flooding in a typical year from, and do not have a direct hydrological connection in a typical year to a jurisdictional non-wetland water) from jurisdiction, these features would very likely not have been considered jurisdictional waters of the United States. However, the U.S. District Court for the District of Arizona issued an order on August 30, 2021, vacating and remanding the NWPR in the case of *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency* in Arizona. In light of this order, the agencies have halted implementation of the NWPR and are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime until further notice. As such, at the time of writing, USACE may claim these features as jurisdictional waters of the United States.

The RWQCB typically does claim jurisdiction over isolated wetlands under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) and therefore would most likely consider these wetlands to be waters of the state in any event. As waters of the state, and potential waters of the United States, these wetlands would be considered sensitive habitats for CEQA assessment purposes. The wetlands are not associated with a stream and therefore would not constitute sensitive riparian habitat claimed by CDFW.

A ditch, which was onsite and partially within the Hetch Hetchy right-of-way, was dominated by upland (non-wetland) vegetation during the April 2019 and August 2021 site visit made by H.T. Harvey & Associates. A visit to the site on December 31, 2021, after a prolonged and heavy rain event, revealed evidence of only a very small amount of the runoff that flowed through this ditch during the storm. The ditch drains to the Menlo Park stormwater system. Therefore, this feature is not considered sensitive or expected to be jurisdictional as a water of the United States because of the lack of hydrophytic vegetation.

This also indicates that hydric soils and wetland hydrology area also lacking, that this feature is very likely intermittent or ephemeral, and that it does not connect to a jurisdictional feature, such as a tributary or navigable water. In addition, because this feature was dug in uplands for the purpose of draining uplands and does not replace a natural drainage, it is considered an “artificial” drainage feature created for the purpose of conveying stormwater runoff. Moreover, ditches with ephemeral flows that are not relocated waters of the state or excavated in waters of the state are typically not considered waters of the state. Therefore, this feature would not be considered a water of the state. The brackish marsh habitat north and northeast of the Project Site provides habitat of higher quality compared with the forested wetland and the two seasonal wetland or aquatic features within the Study Area; however, the brackish marsh is outside the 5-mile radius that encompasses the Project Vicinity.

Regulatory Setting

Federal

Federal Endangered Species Act

The ESA protects federally listed wildlife species from harm or *take*, which is broadly defined as intending to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect” or attempting 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. Generally, listed plant species are legally protected from take under the ESA only if they occur on federal lands.

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) have jurisdiction over federally listed threatened and endangered species under the ESA. USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under the ESA but may become listed in the near future and are often included in review of a project.

Federal Migratory Bird Treaty Act of 1918

The federal Migratory Bird Treaty Act (MBTA), 16 United States Code Section 703, prohibits the 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 one having eggs or young, as described by USFWS in its June 14, 2018, memorandum “Destruction and Relocation of Migratory Bird Nest Contents.” Nest starts (i.e., nests that are under construction and do not yet contain eggs) and inactive nests are not protected from destruction.

In its June 14, 2018, memorandum, USFWS clarified the text regarding destruction of an active nest “while conducting any activity where the intent of the action is not to kill migratory birds or destroy their nests or contents,” noting that such conduct is not prohibited under the MBTA.

Clean Water Act

The Clean Water Act (CWA) functions to maintain and restore the physical, chemical, and biological integrity of waters of the United States, which include, but are not limited to, tributaries to traditionally navigable waters that are currently or were historically used for interstate or foreign commerce, as well as adjacent wetlands. Historically, in non-tidal waters, USACE jurisdiction extended to the ordinary high-water mark (OHWM), which is defined in Title 33, Code of Federal Regulations (CFR), Part 328.3. If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHWM

to the outer edges of the wetlands. Wetlands that are not adjacent to waters of the United States or tributaries are termed “isolated wetlands” and, depending on the circumstances, typically not 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, as defined in 33 CFR 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.”

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

USACE Jurisdictional Areas

In April 2020, EPA and USACE published a regulation regarding a new definition of waters of the United States. This regulation, the NWPR, revised the definition of waters that are federally regulated under the CWA. The new NWPR no longer narrows the definition of waters of the United States by focusing on traditional navigable waters and whether there is a surface water connection between them. The new NWPR was published in the *Federal Register* on April 21, 2020 (85 *Federal Register* 22250) and became effective June 22, 2020.

The revised definition identifies four categories for federally regulated waters, as follows:

- Territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries to those waters;
- Certain lakes, ponds, and impoundments; and
- Wetlands adjacent to jurisdictional waters.

This final action lists 12 categories of exclusions, including the following:

- Features that contain water only in direct response to rainfall (e.g., ephemeral streams);
- Groundwater;
- Many ditches, including most farm and roadside ditches;
- Converted cropland;
- Farm and stock watering ponds; and
- Waste treatment systems.

According to the definition, there must be a surface water connection that is at least intermittent or perennial, such as wetlands that are meaningfully connected to other jurisdictional waters (e.g., by directly abutting or having regular surface water communication with jurisdictional waters). However, there can be non-jurisdictional connectors (e.g., ditches, sheetflow) between two jurisdictional waters.

The revised definition leaves unchanged the parameters used to identify and delineate wetlands and the OHWM characteristics used to define the upper boundary of USACE jurisdiction over non-wetland waters such as streams, ponds, and lakes. The boundaries of nontidal, non-wetland waters (streams) were delineated at the OHWM, as defined in 33 CFR 328.3. The OHWM represents the limit of potential USACE jurisdiction over non-tidal waters (e.g., streams, ponds) in the absence of adjacent wetlands (33 CFR 328.04).

USACE defines jurisdictional wetlands under CWA Section 404 as areas that exhibit positive field indicators for all three wetland parameters. The three parameters used to determine the presence of CWA Section 404 wetlands are (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. According to the *Corps of Engineers Wetlands Delineation Manual*,⁹ “evidence of a minimum of one positive wetland indicator from each parameter (vegetation, soil, and hydrology) must be found in order to make a positive wetland delineation.” However, as stated above, EPA and USACE have halted implementation of the NWPR and are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime until further notice. As such, at the time of writing, USACE may claim these features as jurisdictional waters of the United States.

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 United States. This includes discharging fill or building wharfs, piers, jetties, or other structures without Congressional approval or authorization from the Chief of Engineers and Secretary of the Army (33 United States Code 403).

Navigable waters of the United States, defined in 33 CFR 329.4, include all waters that are subject to the ebb and flow of the tide and those that are presently or have historically been used in commerce. The shoreward jurisdictional limit of tidal waters is defined in 33 CFR 329.12 as “the line on the shore reached by the plane of the mean (average) high water.” It is important to understand that USACE does not regulate wetlands under Section 10, only the aquatic or open waters component of bay habitat. In addition, there is overlap between Section 10 jurisdiction and Section 404 jurisdiction. According to 33 CFR 329.9, a water body 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 because of changed conditions 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 influences that 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 the mean high-water line in its “unobstructed, natural state”; and (3) there is no evidence that the area was ever above the mean high-water line.

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

State

California Endangered Species Act

The CESA (California Fish and Game Code, Chapter 1.5, Sections 2050–2116) prohibits the take of any plant or animal listed as an endangered, threatened, or candidate species. In accordance with the CESA, CDFW has jurisdiction over state-listed species (California Fish and Game Code Section 2070). CDFW regulates activities that may result in take of individuals (i.e., intending to “hunt, pursue, catch, capture, or kill” or “attempting 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. CDFW, however, has interpreted take to include the “killing of a member of a species that is the proximate result of habitat modification.”

⁹ Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Available: <https://www.lrh.usace.army.mil/Portals/38/docs/USACE%2087%20Wetland%20Delineation%20Manual.pdf>. Accessed: March 15, 2022.

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 refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid the effects. CEQA requires full disclosure of the environmental effects of agency actions, such as a general plan update or implementation of projects covered by the plan, on resources such as air quality, water quality, cultural resources, and biological resources. The State Resources Agency–promulgated guidelines for implementing CEQA are known as the CEQA Guidelines.

Section 15380(b) of the CEQA Guidelines provides that a species that is 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 ESA and the CESA as well as the section of the California Fish and Game Code dealing with rare or endangered plants and animals (Sections 2050–2115.5). This section was included in the guidelines to deal primarily 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 USFWS or CDFW or a species that is locally or regionally rare.

CDFW has produced three lists (i.e., amphibians and reptiles, birds, and mammals) of “species of special concern” that serve as “watch lists.” Species on these lists are limited in distribution or the extent of their habitats has been reduced substantially such that a threat to their populations may be imminent. Therefore, their populations should be monitored. They may receive special attention during environmental review as potentially rare species but do not have specific statutory protection. All potentially rare or sensitive species, or habitats that are capable of supporting rare species, are considered for environmental review per CEQA Section 15380(b).

The CNPS, a non-governmental conservation organization, developed CRPRs for plant species of concern in California in its *Inventory of Rare and Endangered Plants*.¹⁰ Although the CNPS is not a regulatory agency and plants on the 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 on these species may be considered significant. Impacts on plants that are listed by the CNPS as 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 such species are less frequently considered significant.

Compliance with CEQA Guidelines Section 15065(a) requires consideration of plant or animal communities. Vegetation types of “special concern” are tracked in the CNDDDB RareFind database. Furthermore, CDFW ranks sensitive vegetation alliances according to their global (G) and state (S) rankings, which are analogous to those provided in the CNDDDB. Global rankings of natural communities (G1–G5) reflect the overall condition (i.e., rarity and endangerment) of a habitat throughout its range, whereas S rankings reflect the condition of a habitat within California. If an alliance is marked as G1–G3, all associations within it would also be high priority. CDFW provides the Vegetation Classification and Mapping Program’s currently accepted list of vegetation alliances and associations.¹¹

¹⁰ California Native Plant Society. 2021. *Inventory of Rare and Endangered Plants* (7.0 and 9.0 online editions). Available: <http://www.cnps.org/inventory>. Accessed: March 15, 2022.

¹¹ California Department of Fish and Wildlife. 2021. *Vegetation Classification and Mapping Program: Natural Communities List*. Available: http://www.dfg.ca.gov/biogeodata/vegcamp/natural_communities.asp. Accessed: December 2021.

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 generally 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 flows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. This includes watercourses having a 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 part of a watercourse. California Fish and Game Code Section 2786 defines *riparian habitat* as “lands that contain habitat that grows close to and depends on 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 a minimum, CDFW would claim jurisdiction over a stream’s bed and bank. In areas that lack a vegetated riparian corridor, CDFW jurisdiction would be the same as USACE jurisdiction. 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 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 the protection of certain wildlife species. For example, Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian species, except as provided by other sections of the code.

California Fish and Game Code Sections 3503, 3513, and 3800, as well as 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 CDFW. Raptors (i.e., eagles, hawks, owls) and their nests are specifically protected in California under 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 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 such as the destruction of an occupied roost for a nonbreeding bat resulting in the mortality of non-game mammals, including bats, or disturbances that result in the loss of a maternity colony and the death of young may be considered take by CDFW.

Porter-Cologne Water Quality Control Act

The State Water Board 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. The board's authority comes from the CWA and the state's Porter-Cologne Act, which broadly defines waters of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because the Porter-Cologne Act 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 United States. 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 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 the bank.

On April 2, 2019, the State Water Board adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. In these new regulations, effective as of May 28, 2020, riparian habitats are not specifically described as waters of the state but, instead, as important buffer habitats for streams that do conform to the state wetland definition. The procedures describe riparian habitat buffers as important resources that may be included in required mitigation packages for permits concerning impacts on waters of the state as well as permit authorizations from the RWQCBs.

Pursuant to the CWA, projects that are regulated by 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 may require waste discharge requirements, even if the area occurs outside USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements, even if USACE does not (e.g., for riparian habitats that are buffers to waters of the state). Under the Porter-Cologne Act, the State Water Board and nine RWQCBs also have responsibility for granting CWA National Pollutant Discharge Elimination System (NPDES) permits and waste discharge requirements for certain point-source and nonpoint-source discharges to waters. These regulations limit impacts on aquatic and riparian habitats from a variety of urban sources.

Waters of the State

The State Water Board's newly adopted regulations (April 2, 2019), effective as of May 28, 2020, entitled State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, create a new statewide wetland definition that expands to include features that were not previously covered under federal law and creates a new permitting program for activities that result in the discharge of dredged or fill materials to any waters of the state. Under the Porter-Cologne Act, *waters of the state* are broadly defined as "[a]ny surface water or groundwater, including saline waters within state boundaries," including both natural and certain artificial or constructed facilities. Waters of the state include both waters of the United States and non-federal waters of the state.

Local

Menlo Park Municipal Code

The Menlo Park Municipal Code contains ordinances for Menlo Park. Title 16, Zoning, includes regulations relevant to biological resources on the Project Site, as discussed below.

Bird-Friendly Design. All new construction, regardless of size, is required to comply with the City of Menlo Park (City) bird-safe design requirements provided in Menlo Park Municipal Code Sections 16.43.140(6) (with respect to the O District) and 16.45.130(6) (with respect to the RMU District). These design requirements include appropriate measures to reduce bird collisions, as follows:

- A. No more than 10 percent of the façade surface area shall have non-bird-friendly glazing.
- B. Bird-friendly glazing includes, but is not limited to, opaque glass; clear glass with patterns covering the outside surface; paned glass with fenestration, frit, or etching patterns; and nonreflective glass with external screens. Highly reflective glass is not permitted.
- C. Occupancy sensors or other switch control devices shall be installed on non-emergency lights and programmed to shut off during non-work hours and between 10:00 p.m. and sunrise.
- D. The placement of buildings shall avoid the potential funneling of flight paths toward a building façade.
- E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.
- F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios, and green roofs.
- G. Rodenticides shall not be allowed.

Per the zoning ordinance, a project may receive a waiver from requirements A through F, subject to submittal of a site-specific evaluation from a qualified biologist and review and approval by the Planning Commission. A waiver from requirement G is not authorized.

Landscape Design Plan. Menlo Park Municipal Code Section 12.44.090(a)(1)(G) provides that the use of invasive or noxious plant species is strongly discouraged. Invasive species are defined as those plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. A noxious weed refers to any weed designated by weed control regulations in the Weed Control Act and identified on a regional district noxious weed control list.

Heritage Trees. The Proposed Project would be subject to Menlo Park Municipal Code Section 13.24, which establishes regulations for the preservation of heritage trees. Section 13.24 defines *heritage trees* as:

- Trees of historical significance, special character, or community benefit specifically designated by resolution of the City Council;
- An oak tree (*Quercus* sp.) that is native to California and has a trunk circumference of 31.4 inches (i.e., a diameter of 10 inches) or more, as measured at 54 inches above the natural grade; and
- All trees other than oaks that have a trunk circumference of 47.1 inches (i.e., a diameter of 15 inches) or more, as measured at 54 inches above the natural grade, with the exception of trees that are less than 12 feet tall, which are exempt from this section.

To protect heritage trees, Section 13.24.030 of the Menlo Park Municipal Code requires a tree protection plan prepared by a certified arborist to be submitted for any work performed within a tree protection zone, which is an area 10 times the diameter of the tree. Furthermore, all tree protection plans should be reviewed and approved by the Public Works Director or his or her designee prior to issuance of any permit for grading or construction.

The removal of heritage trees or pruning of more than one-fourth of the branches or roots within a 12-month period requires a permit from the City's Director of Public Works or his or her designee and payment of a fee. The Director of Public Works may issue a permit when the removal or major pruning of a heritage tree is reasonable, based on considerations such as the condition of the tree, the need for removal (e.g., to accommodate proposed improvements), the ecological and long-term value of the tree, and feasible alternatives that would allow for tree preservation.

City of Menlo Park General Plan

The City General Plan consists of the Open Space/Conservation, Noise, and Safety Elements, adopted May 21, 2013; the 2015–2023 Housing Element, adopted by the City on April 1, 2014; and the Circulation and Land Use Elements, adopted November 29, 2016. The following policies from the Open Space Element that have been adopted to avoid or mitigate environmental impacts are relevant to biological resources and the Proposed Project:

Goal OSC1: Maintain, Protect, and Enhance Open Space and Natural Resources.

Policy OSC1.1: Natural Resources Integration with Other Uses. Protect Menlo Park's natural environment and integrate creeks, utility corridors, and other significant natural and scenic features into development plans.

Policy OSC1.2: Habitat for Open Space and Conservation Purposes. Preserve, protect, maintain, and enhance water areas, water-related areas, and plant and wildlife habitat for open space and conservation purposes.

Policy OSC1.3: Sensitive Habitats. Require new development on or near sensitive habitats to provide baseline assessments prepared by qualified biologists and specify requirements relative to the baseline assessments.

Policy OSC1.4: Habitat Enhancement. Require new development to minimize the disturbance of natural habitats and vegetation and require re-vegetation of disturbed natural habitat areas with native or non-invasive naturalized species.

Policy OSC1.5: Invasive, Non-Native Plant Species. Avoid the use of invasive, non-native species, as identified on the lists of invasive plants maintained at the California Invasive Plant Council and U.S. Department of Agriculture, or other authoritative sources, in landscaping on public property.

Policy OSC1.6: South Bay Salt Pond Restoration Project and Flood Management Project. Continue to support and participate in federal and state efforts related to the South Bay Salt Pond Restoration Project and Flood Management Project. Provide public access to the Bay for enjoyment and recreational opportunities as well as conservation-focused educational opportunities related to the Bay, sloughs, and marshes.

Policy OSC1.15: Heritage Trees. Protect heritage trees, including during construction, through enforcement of the Heritage Tree Ordinance (Section 13.24 of the Menlo Park Municipal Code).

Goal OSC2: Provide Parks and Recreational Facilities.

Policy OSC2.4: Parkland Standards. Strive to maintain a standard of 5 acres of parkland per 1,000 residents.

Policy OSC-2.6 Pedestrian and Bicycle Paths. Develop pedestrian and bicycle paths consistent with the recommendations of local and regional trail and bicycle route projects, including projects involving the San Francisco Bay Trail (Bay Trail).

The following goals and policies from the Land Use Element that have been adopted to avoid or mitigate environmental impacts pertain to the Proposed Project:

Goal LU-6: Preserve open space lands for recreation; protect natural resources, as well as air and water quality; and protect and enhance scenic qualities.

Policy LU-6.5: Open Space Retention. Maximize the retention of open space on larger tracts (e.g., portions of the St. Patrick's Seminary site) through means such as rezoning, consistent with existing uses; clustered development; acquisition of a permanent open space easement; and/or the transfer of development rights.

Policy LU 6.6: Public Bay Access. Protect and support public access to the Bay for the enjoyment of open water, sloughs, and marshes, including restoration efforts and completion of the Bay Trail.

Policy LU-6.7: Habitat Preservation. Collaborate with neighboring jurisdictions to preserve and enhance the Bay, shoreline, San Francisquito Creek, and other wildlife habitat and ecologically fragile areas to the maximum extent possible.

Policy LU-6.8: Landscaping in Development. Encourage extensive and appropriate landscaping in public and private development to maintain the city's tree canopy and promote sustainability and healthy living, particularly through an increase in the number of trees and the use of water-efficient landscaping in large parking areas and the public right-of-way.

Policy LU-6.11. Baylands Preservation. Allow development near the Bay only in already-developed areas.

Environmental Impacts

This section describes the impact analysis related to biological resources for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- 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.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.
- 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.

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Methods for Analysis

The analysis below is based on the two BRAs prepared by H. T. Harvey & Associates for the Proposed Project. The BRAs were prepared in conformance with ConnectMenlo EIR Mitigation Measure BIO-1, which requires preparation of a BRA, as specified by the specific conditions of the mitigation measure.

The identification of potential impacts on biological resources relied on a review of relevant Project information, scientific literature, and technical databases as well as site visits. Prior to conducting initial fieldwork, H. T. Harvey & Associates ecologists reviewed the original Project plans and the Project description provided by the Project Sponsor in November 2017 as well as aerial images,¹² a USGS topographic map, the CNDDDB,¹³ and other relevant scientific literature and technical databases. Previous reports prepared for the Project Site and Project Vicinity were also reviewed, including the arborist report for the main Project Site,¹⁴ a supplemental report prepared for the Hamilton Avenue Parcels North and South,¹⁵ the Final EIRs for the nearby Facebook Campus¹⁶ and the Facebook Campus Expansion Project,¹⁷ the Final EIR for the ConnectMenlo Project,¹⁸ and the Comprehensive Conservation Plan and Environmental Assessment for the Refuge.¹⁹ In addition, for plants, H. T. Harvey & Associates reviewed all species on the current CNPS CRPR 1A, 1B, 2A, and 2B lists occurring in the USGS Palo Alto, California, quadrangle as well as the eight surrounding quadrangles (Woodside, San Mateo, Redwood Point, Newark, Mountain View, Cupertino, Mindego Hill, and La Honda). Quadrangle-level results are not maintained for CRPR 3 and 4 species; therefore, a search of CNPS inventory records for such species occurring in San Mateo County²⁰ was also conducted. In addition, H. T. Harvey & Associates queried the CNDDDB²¹ for natural communities of special concern in the Project region. For purposes of this section, where this term is used, “Project Vicinity” encompasses a 5-mile radius surrounding the Project Site.

¹² Google, Inc. 2020. *Google Earth* (version 7.3.0.3832). Available: <http://www.earth.google.com>. Accessed: March 15, 2022.

¹³ California Department of Fish and Wildlife. 2021. *California Natural Diversity Database*. RareFind 5.0. Available: <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>. Accessed: December 2021.

¹⁴ SBCA Tree Consulting. 2017. *Willow Village Tree Survey*. July 11.

¹⁵ SBCA Tree Consulting. 2021. *Hamilton Avenue Parcels North and South Tree Survey*. April 2.

¹⁶ Atkins. 2012. *Menlo Park Facebook Campus Project Final Environmental Impact Report*. Prepared for the City of Menlo Park, CA. April. Available: <https://menlopark.org/DocumentCenter/View/2637/Full-Final-EIR?bidId=>. Accessed: March 15, 2022.

¹⁷ ICF International. 2016. *Facebook Campus Expansion Project Final EIR*. Prepared for the City of Menlo Park, CA. September. Available: <https://www.menlopark.org/DocumentCenter/View/11885/Facebook-Final-EIR?bidId=>. Accessed: March 15, 2022.

¹⁸ PlaceWorks. 2016. *ConnectMenlo: General Plan Land Use and Circulation Elements and M-2 Area Zoning Update for the City of Menlo Park Final Environmental Impact Report*. Prepared for the City of Menlo Park, CA.

¹⁹ U.S. Fish and Wildlife Service. 2012. *Don Edwards San Francisco Bay National Wildlife Refuge Comprehensive Conservation Plan and Environmental Assessment*. October. Available: [https://pubs.usgs.gov/ds/754/CaliforniaNevadaRegion\(R8\)/Don%20Edwards%20San%20Francisco%20Bay%20NWR%20-%20NWR%20visitor%20survey%202012.pdf](https://pubs.usgs.gov/ds/754/CaliforniaNevadaRegion(R8)/Don%20Edwards%20San%20Francisco%20Bay%20NWR%20-%20NWR%20visitor%20survey%202012.pdf). Accessed: March 15, 2022.

²⁰ California Native Plant Society. 2021. *Inventory of Rare and Endangered Plants* (7.0 and 9.0 online editions). Available: <http://www.cnps.org/inventory>. Accessed: December 2021.

²¹ California Department of Fish and Wildlife. 2021. *California Natural Diversity Database*. RareFind 5.0. Available: <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>. Accessed: December 2021.

The Study Area was evaluated for the purpose of ensuring that all potential direct, indirect, and cumulative effects on biological resources would be considered. Reconnaissance-level field surveys of the Project Site, as well as the portion of the Study Area east of Willow Road and areas within the Dumbarton Rail Corridor, both east and west of Willow Road, were conducted by wildlife and plant ecologists from H.T. Harvey & Associates in October 2017, November 2017, April 2019, and June 2020. The purpose of the surveys was to provide a Project-specific impact assessment for the Proposed Project, as described above. Specifically, surveys were conducted to (1) assess existing biotic habitats and general plant and wildlife communities in the Study Area, (2) assess the potential for the Proposed Project to affect special-status species or their habitats, and (3) identify potential jurisdictional habitats, such as waters of the United States/state and riparian habitat. Additional site visits by H.T. Harvey & Associates were conducted in August 2021 for delineation of regulated habitats and in December 2021 to examine conditions in the southeast ditch following a period of heavy rains.

Summary of Analysis in the ConnectMenlo EIR

The ConnectMenlo EIR analyzed the following impacts that would result from implementing the updates to the Land Use and Circulation Elements and the M-2 Area Zoning Update:²²

- Impacts related to special-status species or the inadvertent loss of bird nests in active use were analyzed in the ConnectMenlo EIR as Impact BIO-1 (pages 4.3-19 to 4.3-23) and found to be less than significant with mitigation incorporated. The impact could be potentially significant because special-status species have the potential for occurrence in the remaining undeveloped lands in the Bayfront Area and, much more infrequently, in the semi-natural (e.g., ditches, annual grassland) portions of Menlo Park where construction with future development allowed under the City General Plan could occur. Implementation of Mitigation Measure BIO-1 would reduce the impact to less than significant by requiring the preparation of a Project-specific baseline biological resources assessment, prepared by a qualified biologist, on sites containing natural habitat with features such as mature and native trees or unused structures that could support special-status species and other sensitive biological resources as well as common birds protected under the MBTA. If sensitive biological resources are determined to be present, measures such as preconstruction surveys, buffers, and bird-safe design practices and materials, developed by the qualified biologist, would provide adequate avoidance or compensatory mitigation if avoidance is infeasible. Where jurisdictional waters or federally or state-listed species would be affected, appropriate authorization would be obtained by the Project Sponsor.
- Impacts related to the loss of coastal salt marsh vegetation in the Baylands and possibly areas of riparian scrub and woodland along San Francisquito Creek and other drainages in the area were analyzed in the ConnectMenlo EIR as Impact BIO-2 (pages 4.3-24 and 4.3-25) and found to be less than significant with mitigation incorporated. Implementation of Mitigation Measure BIO-1 would reduce this impact to less than significant, as described in the first bullet point.
- Impacts related to the loss of wetland habitat in the area were analyzed in the ConnectMenlo EIR as Impact BIO-3 (pages 4.3-25 and 4.3-26) and found to be less than significant with mitigation incorporated. Implementation of Mitigation Measure BIO-1 would reduce this impact to less than significant, as described in the first bullet point.

²² City of Menlo Park. 2016. *ConnectMenlo: General Plan Land Use and Circulation Elements and M-2 Zoning Update for the City of Menlo Park*. June 1. Prepared by PlaceWorks, Berkeley, CA. Menlo Park, CA. Available: <https://www.menlopark.org/1013/Environmental-Impact-Report>. Accessed: March 19, 2021.

Impacts related to the movement of fish and wildlife, wildlife corridors, or wildlife nursery sites in the area were analyzed in the ConnectMenlo EIR as Impact BIO-4 (page 4.3-26) and found to be less than significant with mitigation incorporated. Implementation of Mitigation Measure BIO-1 would reduce this impact to less than significant, as described in the first bullet point.

- Impacts related to conflicts with local policies and ordinances for the area were analyzed in the ConnectMenlo EIR as Impact BIO-5 (page 4.3-27) and found to be less than significant because the City General Plan is the overriding planning document for Menlo Park and the proposed amendments analyzed under the ConnectMenlo EIR would ensure internal consistency between the City General Plan and the City Zoning Ordinance. Furthermore, with adherence to City General Plan goals, policies, and programs in the Land Use and Open Space/Conservation, Noise, and Safety Elements and the City's Tree Preservation Ordinance, in combination with Menlo Park Municipal Code Chapters 12.44, Water-Efficient Landscaping, and 13.24, Heritage Trees, as well as federal and state laws, no conflicts with local plans and policies were anticipated, and impacts were determined to be less than significant.
- Impacts related to conflicts with an adopted habitat conservation plan, natural community conservation plan, or other local, regional, or state habitat conservation plan in the area were analyzed in the ConnectMenlo EIR as Impact BIO-6 (pages 4.3-27 to 4.3-28) and found to be less than significant with mitigation incorporated. Implementation of Mitigation Measure BIO-1 would reduce this impact to less than significant, as described in the first bullet point.

Impacts Not Evaluated in Detail

Impacts on an Adopted Habitat Conservation Plan or Natural Community Conservation Plan. The Project Site is not a part of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. The salt marshes immediately north of SR 84 and beyond the Project Site are part of the Refuge, which is actively constructing/implementing habitat restoration projects and pursuing the expansion and protection of habitats and associated plant and wildlife species contained therein. The Refuge is also closely involved in the South Bay Salt Pond Restoration Project, which has active restoration sites approximately 4 miles northeast of the Project Site, across Dumbarton Bridge (SR 84).

Implementation of the Proposed Project would include construction of a tunnel (Willow Road Tunnel) under the current Dumbarton Cutoff Line at Willow Road to facilitate tram, service-vehicle, bicycle, and pedestrian travel between the main Project Site and the West Campus. Although construction of Willow Road Tunnel may affect the California Department of Transportation (Caltrans) right-of-way as well as the San Mateo County Transit District (SamTrans) Dumbarton Corridor, all construction would be within the main Project Site, the Caltrans right-of-way, the Dumbarton Corridor, and the Meta Platforms, Inc. ("Meta"), Campus south of the Bay Trail and would not extend into the Refuge. The Proposed Project would require upgrades to the existing PG&E Ravenswood substation, which is near the Dumbarton Bridge approach. The substation is surrounded by wetlands; however, the site is paved and has limited vegetation. Furthermore, all upgrades and improvements to the existing substation would be within the substation site and would not encroach into the wetlands, either directly or indirectly. The proposed improvements would be within the footprint of the existing substation site. Additional offsite improvements would include the placement of utility lines under existing rights-of-way, roadway improvements, and construction of a roundabout. Overall, none of the Proposed Project's construction activities or operations would interfere with management or expansion of the Refuge or restoration of the salt ponds. The Proposed Project would result in no impact on an adopted habitat conservation plan,

natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, this impact is not evaluated further.

Impacts and Mitigation Measures

Impact BIO-1: Direct Impacts on Special-Status Species. The Proposed Project would not 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. (LTS)

There are no special-status plant species on the main Project Site, Hamilton Avenue Parcels North and South, or the Willow Road Tunnel site, and no wildlife species are expected to breed in these areas. However, as noted in Table 3.9-1, nonbreeding San Francisco common yellowthroat, Alameda song sparrow, and pallid bat individuals could occasionally forage on the main Project Site and Hamilton Avenue Parcels North and South. These species are not anticipated to forage at the PG&E Ravenswood substation because of the lack of vegetation at the site. The San Francisco common yellowthroats and Alameda song sparrows that breed in the offsite brackish marsh to the north and northeast disperse, particularly during the nonbreeding season, along the Dumbarton Rail Corridor, which bisects the Willow Road Tunnel site, to the dense vegetation on the northern edge of the main Project Site and Hamilton Avenue Parcel North, areas where they may forage. Pallid bats are expected to occur on or near the Project Site only on rare occasion, if at all. Although dispersing individuals could occasionally forage on the main Project Site and Hamilton Avenue Parcels North and South, because of the absence of high-quality roosting sites for pallid bats, this species is not expected to roost on the main Project Site or Hamilton Avenue Parcels North and South.

During demolition and construction, vegetation removal, noise, and the operation of heavy equipment could disturb foraging yellowthroats and song sparrows. In addition, disturbances within vegetation could result in habitat degradation or the loss of foraging habitat as well as declines in food resources for these bird species, along with pallid bat. However, in their current state, the main Project Site, Hamilton Avenue Parcels North and South, and the Willow Road Tunnel site do not provide high-quality habitat for these species. The species would not be likely to occur in these areas or close enough to be disturbed by demolition or construction activities. Given the relatively urban characteristics of the area, the amount of habitat that could be degraded would be minimal, as would the number of individuals that could be disturbed by Project activities.

The installation of lighting on buildings, along roads and paths, and in parking lots may result in potential impacts on animal species. Many animals, both special-status and common species, are sensitive to light cues, which influence their physiology and shape their behaviors, particularly during the breeding season. Artificial lighting may also indirectly affect animals by increasing the nocturnal activity of predators such as owls, hawks, and mammalian predators. The presence of artificial light may influence habitat use by rodents and breeding birds by causing avoidance of well-lit areas, resulting in a net loss of habitat availability and quality. However, because the Project Site is currently occupied by single- and multi-story buildings, parking lots, and roads with associated lighting, the Proposed Project is not expected to result in a substantial increase in artificial lighting. In addition, areas surrounding the main Project Site, Hamilton Avenue Parcels North and South, and the Willow Road Tunnel site are primarily developed urban or ruderal habitats that do not support sensitive species that might be significantly affected by illumination from the Proposed Project. If lighting in the northern portion of the main Project Site, Hamilton Avenue Parcels North and South, and the Willow Road Tunnel site were bright enough to increase illumination within the wetlands to the north/northeast, such an increase in lighting could have

adverse effects on special-status species in those wetlands. However, the Proposed Project would comply with City General Plan Policy LU-2.3, which requires mixed-use projects with residential units to consider potential compatibility issues associated with light spillover. As a result, lighting on the main Project Site, Hamilton Avenue Parcels North and South, and the Willow Road Tunnel site is not expected to increase the level of illumination on the habitat of sensitive species to the north and northeast. Furthermore, as discussed in Impact BIO-5, the Proposed Project would be required to comply with Mitigation Measure BIO-5.3 to reduce lighting impacts on migratory birds.

Construction on offsite areas could include the placement of utilities lines under existing rights-of-way, construction of roundabout, and improvements to a PG&E substation. All of these areas are developed and have no natural features that provide habitat for special-status species. Although the PG&E Ravenswood substation is adjacent to the marsh and wetlands, the upgrades would not introduce new or expanded lighting and would not affect the wetlands. Therefore, Project activities would not result in substantial impacts on the population and habitat of special-status species. Impacts would be *less than significant*.

Impact BIO-2: Indirect Impacts on Special-Status Species. The Proposed Project would result in substantial predation among special-status bird and mammal species that breed in the nearby brackish marshes and may forage, in the case of special-status birds, in the Project area. (LTS/M)

As previously discussed, feral cat populations have been observed at the main Project Site, which increases predation of local animal populations, including special-status species. Implementation of the Proposed Project has the potential to result in an increase in the feral cat population. The main Project Site would include a new open space area as well as the publicly accessible Elevated Park, which would be located on an overpass above Willow Road. All of these new open space areas could provide suitable habitat for feral cat colonies and, as such, could facilitate increased predation among special-status species in the Baylands north of the Project Site because of their proximity. The influx of residents and their pets, or the establishment of new feral cat feeding stations by residents and workers, would also increase the feral cat population on the main Project Site. In addition, Willow Road Tunnel would provide direct access to the West Campus and a connection to the undercrossing below Bayfront Expressway that links the Bay Trail and the Meta Campuses, both East and West. The tunnel would be 12 feet tall and 50 feet wide, running under the Dumbarton Cutoff Line at Willow Road to facilitate tram, service-vehicle, bicycle, and pedestrian travel between the main Project Site and the West Campus. Willow Road Tunnel could increase feral cat movement in the Project area; it could also increase access to the Baylands north of the Project Site where special-status species are known to be present. Offsite improvements at the PG&E Ravenswood substation, other utility improvements, and intersection roadway improvements would not facilitate increased predation of special-status species.

Feral cats could access the main Project Site via the new Elevated Park or Willow Road Tunnel, allowing them to cross Willow Road and the Dumbarton Rail Corridor. Migration is most conceivable at night when traffic is reduced and mammalian predators are less likely to be injured or killed by cars; however, predators can already cross this area at street level. Therefore, indirect impacts on special-status species would be potentially significant.

MITIGATION MEASURE. Implementation of Project-specific Mitigation Measure BIO-2.1 would reduce impacts to *less than significant with mitigation*.

BIO-2.1: Feral Cat Management Program.

The Project Sponsor shall implement a feral cat management program, similar to the program developed in conjunction with the Peninsula Humane Society and the Society for the

Prevention of Cruelty to Animals for the East Campus in 2013. For one week every 3 months (i.e., each quarter), three live trap cages, designed to trap cats, shall be placed around the perimeter of the main Project Site in locations where feral cats are likely to prey upon native wildlife species. Each trap cage shall be monitored and maintained on a daily basis during the week when traps have been set to determine whether a feral cat has been caught and whether the trap has inadvertently captured a non-target species. If a feral cat is caught, a representative from a pest control operator (or a similar service organization/company) shall be contacted and dispatched to transport the trapped cat to the Humane Society of San Mateo County, a local cat shelter, a local cat rescue facility, or other local facility that accepts feral cats. If an animal other than a feral cat is caught in one of the traps, it shall be released immediately at the trap location.

Impact BIO-3: Impacts on Riparian Habitat and Other Sensitive Natural Communities. Project demolition and construction would affect riparian habitat and other sensitive natural communities. (LTS/M)

No riparian habitats or other sensitive natural communities are present on the main Project Site, Hamilton Avenue Parcels North and South, the Willow Road Tunnel site, or at the PG&E Ravenswood substation. An isolated forested wetland is present offsite, immediately north of the main Project Site. A linear area of herbaceous seasonal wetland is present immediately north of the Hamilton Avenue Parcels North and South portion of the Project Site. Another herbaceous seasonal wetland is present just outside the northeast corner of the Project Site. These wetlands are small and isolated, located in depressional areas; there is no surface connection to more extensive wetlands. Because of their small, isolated nature and the lack of high-quality habitat for wildlife, the wetlands are not high-quality habitat features. Nevertheless, forested wetlands are relatively scarce along the edge of the Bay; seasonal wetlands along the edge of the Bay have declined because of development and fill. Therefore, the wetlands are considered sensitive habitat areas. In addition, a large brackish marsh is present approximately 215 feet northeast of the Willow Road Tunnel site, north of the Dumbarton Rail Corridor and east of Willow Road. However, this area would not be within the Project footprint and would not be affected by construction.

Development undertaken as part of the Proposed Project would result in a large portion of the main Project Site and Hamilton Avenue Parcels North and South being subject to soil disturbance because of replacement of the outdated industrial complex on the Main Project Site with a new mixed-used campus, relocation of a service station, relocation of roadways, and construction of the Elevated Park access point on Hamilton Avenue Parcels North and South. Trampling, equipment staging, and vegetation removal could contribute to disturbance. Several non-native, invasive plant species occur in the California annual grassland habitat along the northern edge of the Study Area. Invasive species can spread quickly and be difficult to eradicate. Many non-native, invasive plant species produce seeds that germinate readily following disturbance. Furthermore, disturbed areas are highly susceptible to colonization by non-native, invasive species that occur locally or whose propagules are transported by personnel, vehicles, and equipment. Areas of disturbance could promote the spread of non-native species, which could degrade the ecological values of the riparian habitat and natural communities that occur immediately adjacent to the main Project Site and Hamilton Avenue Parcels North and South and adversely affect native plants and wildlife that occur there.

Although no invasive weeds were observed by H.T. Harvey & Associates on the main Project Site and Hamilton Avenue Parcels North and South, it is possible that some offsite grading in areas along the northern edge would be necessary. Such grading may mobilize weeds within the immediate vicinity of the grading. However, given the minimal amount of disturbance in this offsite area, and the fact that surrounding areas are already developed, this disturbance is not expected to increase the spread of non-

native, invasive species into sensitive habitat areas. Furthermore, the Proposed Project would comply with Menlo Park Municipal Code Section 12.44.090(a)(1)(G), which discourages the use of invasive or noxious plant species for landscaping. Therefore, Project activities would not introduce invasive species to the main Project Site and Hamilton Avenue Parcels North and South or facilitate the spread of invasive plants into riparian habitats and other sensitive natural communities surrounding the main Project Site and Hamilton Avenue Parcels North and South. In addition, the invasive species observed on the main Project Site and Hamilton Avenue Parcels North and South are already present in or around the wetland habitats to the north and northeast, and the remainder of the surrounding area is developed/landscaped and therefore not susceptible to habitat degradation from the spread of invasive plants. Construction on offsite areas could include the placement of utility lines under existing rights-of-way, construction of a roundabout, and improvements to a PG&E Ravenswood substation. All of these areas are developed and have no natural features that provide habitat for special-status species. Construction of offsite project components would not result in impacts on special-status species or other sensitive biological resources. Therefore, the Proposed Project would result in less-than-significant impacts due to the spread of non-native, invasive species into sensitive natural communities.

Although the wetlands are outside the boundary for the main Project Site and Hamilton Avenue Parcels North and South, it is possible that these features may be affected, either temporarily or permanently, during Project grading. Construction of a bicycle/pedestrian path along the northern edge of the main Project Site would require soil excavated from basement construction to be brought in to elevate the site. Although a retaining wall, ranging from 2 to 7 feet in height, is proposed to support the path, some vegetation clearing, as well as fill, within the wetlands (or portions of the wetlands) may occur. As a result, it is possible that the entire 0.07-acre isolated forested wetland (as well as an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) and the 0.07-acre herbaceous seasonal wetlands may be lost because of fill. Even if the wetlands are not permanently affected, temporary impacts on wetlands may occur because of construction access, potentially resulting in degradation of wetland vegetation or hydrology. Owing to the scarcity of forested wetlands along the edge of the Bay and the decline in seasonal wetlands in the region, this impact would be potentially significant.

MITIGATION MEASURE. Implementation of Mitigation Measures BIO-3.1, BIO-3.2, and BIO-3.3 would reduce this impact to ***less than significant with mitigation***.

BIO-3.1: Avoid and Minimize Impacts on Riparian Habitat and Other Sensitive Natural Communities.

To the extent feasible, construction activities should avoid or minimize the removal of wetland vegetation or the placement of fill in the wetlands immediately north and northeast of the Project Site. If all direct impacts on wetlands (i.e., vegetation removal and fill) are avoided, Mitigation Measures BIO-3.2 and BIO-3.3 would not need to be implemented. However, if any wetland vegetation needs to be removed from the wetlands, or any fill needs to be placed in the wetlands, Mitigation Measure BIO-3.2 (and Mitigation Measure BIO-3.3 if permanent impacts would occur) shall be implemented.

BIO-3.2: In-Situ Restoration of Temporary Impacts.

If impacts on the wetlands immediately north of the Project Site are temporary, resulting in vegetation removal or temporary fill within the wetland but no permanent fill, then the wetland area shall be restored by the Project Sponsor following construction. The herbaceous seasonal wetlands are likely to become recolonized easily without the need for seeding and planting as long as their existing hydrology and topography are restored following temporary impacts. There is some potential for the arroyo willow clumps in the isolated forested wetland to regrow

from cut stumps. In such a case, the in-situ restoration shall involve simply protecting the area with exclusion fencing following construction to allow for regrowth of vegetation.

For temporary impacts involving removed willow root masses where in-situ restoration is still an option, a more detailed restoration plan shall be developed. The mitigation shall, at a minimum, achieve no net loss of wetland acreage (i.e., jurisdictional wetlands lost to fill shall be replaced through the creation or restoration of wetland habitat of the same type as the affected habitat [either forested or herbaceous seasonal] at a minimum ratio of 1:1 on an acreage basis or as otherwise required by any state or federal permitting agencies) or ecological functions and values through the restoration and enhancement of the affected wetlands to a level equal to or greater than the baseline condition of the existing wetlands. An in-situ restoration approach could involve salvaging wetland plant material prior to construction (e.g., willow cuttings or willow clumps, in the case of the isolated forested wetland) and then replanting the material if the seasonal timing of construction is appropriate. USACE and/or RWQCB approvals may be required to authorize temporary impacts on these features.

BIO-3.3: Provide Compensatory Mitigation.

If any permanent fill of the isolated forested wetland or the herbaceous seasonal wetlands occurs, the Project Sponsor shall provide new wetland habitat of the same type (either forested or herbaceous seasonal) to offset this impact, either through the creation, enhancement, or restoration of wetlands in an appropriate location or through the purchase of mitigation credits from a USACE- or RWQCB-approved wetland mitigation bank. The purchase of such credits shall serve as full mitigation for impacts on these wetland features.²³ If Project-specific creation, enhancement, or restoration of wetland habitat is implemented, habitat shall be restored or created at a minimum ratio of 2:1 (compensation: impact) on an acreage basis or as otherwise required by any state or federal permitting agencies. This ratio is not higher because of the relatively low quality of the wetlands on the Project Site relative to the more extensive, less fragmented wetlands elsewhere in the region, and it is not lower because of the temporal loss of wetland functions and values that would result from the lag between impacts on the wetlands and maturation of the mitigation habitat. USACE and/or RWQCB approvals may be required to authorize permanent impacts on this feature.

To the extent that compensatory mitigation is not provided by purchasing mitigation credits from a USACE- or RWQCB-approved wetland mitigation bank, then, if feasible, compensation shall be provided by creating, enhancing, or restoring wetland habitat so as to achieve the 2:1 ratio somewhere in San Mateo County or as otherwise required by any state or federal permitting agencies. A qualified biologist shall develop a wetland mitigation and monitoring plan that describes the mitigation, including the following components (or as otherwise modified by regulatory agency permitting conditions):

- Summary of habitat impacts and proposed mitigation ratios;
- Goal of the restoration to achieve no net loss of habitat functions and values;

²³ Refer to U.S. Army Corps of Engineers 33 Code of Federal Regulations, Part 325, and the State Water Board's State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (April 2, 2019), pages 28 and 29.

- Location of mitigation site(s) and description of existing site conditions;
- Mitigation design;
 - Existing and proposed site hydrology;
 - Grading plan, if appropriate, including bank stabilization or other site stabilization features;
 - Soil amendments and other site preparation elements, as appropriate;
 - Planting plan;
 - Irrigation and maintenance plan;
 - Remedial measures and adaptive management; and
- Monitoring plan, including final and performance criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. Success criteria shall include quantifiable measurements of wetland vegetation type (e.g., dominance by natives), the appropriate extent for the restoration location, and the provision of ecological functions and values equal to or exceeding those in the affected wetland habitat. At a minimum, success criteria shall include following:
 - At Year 5 post-mitigation, at least 75 percent of the mitigation site shall be dominated by native hydrophytic vegetation.

The wetland mitigation and monitoring plan must be approved by the City and other applicable agencies prior to the wetland impacts and must be implemented within 1 year after the discharge of fill into wetland features. Alternately, offsite mitigation could be provided through the purchase of mitigation credits at an agency-approved mitigation bank, as noted above.

Impact BIO-4: Impacts on State and/or Federally Protected Wetlands. Project demolition and construction could affect state and/or federally protected wetlands. (LTS/M)

As described above, no wetlands occur on the Project Site, but an isolated forested wetland and herbaceous seasonal wetlands are located north and northeast of the Project Site. Furthermore, brackish wetlands occur north and northeast of the boundary for the Project Site. The isolated forested wetland, herbaceous seasonal wetlands, and brackish marsh may be subject to the regulatory jurisdiction of USACE and RWQCB.

As discussed under Impact BIO-3, above, although the Project proposes to avoid the aforementioned features to the extent feasible, it is possible that the 0.07-acre forested wetland (as well as an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) and the 0.07-acre seasonal wetlands along the northern edge of the Project Site may be affected, either temporarily or permanently, during Project grading. Owing to the scarcity of wetlands along the edge of the Bay, this direct impact would be significant. The brackish wetlands are approximately 220 feet from the nearest building and separated from the main Project Site by an approximately 25- to 40-foot-tall self-storage business. There are no brackish wetlands near the Hamilton Avenue Parcels North and South. A large brackish marsh is present approximately 215 feet northeast of the Project Site, north of the Dumbarton Rail Corridor and east of Willow Road. The areas between the Willow Road Tunnel site and the brackish marsh consist of a storage facility, the Dumbarton

Rail Corridor, Willow Road, and an area of uplands planted with native vegetation. The Proposed Project would not cause any direct impacts on any of these brackish wetlands.

Redevelopment has the potential to cause indirect impacts on nearby wetlands or water quality within those wetlands, given the onsite runoff patterns. During the 100-year storm, approximately 16 percent of the main Project Site's runoff flows overland to the brackish wetlands northeast of the site, with the rest flowing westward to the Willow Road storm drain.²⁴ The Proposed Project is expected to increase the area of overland flow somewhat that drains to the northeast corner of the main Project Site during the 100-year storm event but would detain water onsite so as not to exceed existing peak flow rates. Such infrequent storm events are not expected to shape species composition or habitat quality within the wetlands to the north and northeast because those habitats are governed by much more regular/frequent physical and ecological processes. As a result, an increase in runoff from the site during 100-year storm events would not have substantial impacts on wetlands north and northeast of the Project Site.

The Proposed Project's storm drainage system would be designed to convey 10-year storm events, as well as lesser events, from the entire main Project Site to the Willow Road storm drain. During 10-year storm events, as well as lesser events, no runoff would flow overland to the brackish wetlands north and northeast of the main Project Site. In addition, because the peak flow rate to the marsh would not increase during large storm events compared with existing conditions, no significant erosion or sedimentation impacts on the brackish marsh would occur during site discharges to the area. Furthermore, the Proposed Project would install stormwater infrastructure to collect site runoff and direct it into the City's storm drain system rather than the isolated forested wetland or herbaceous seasonal wetlands adjacent to the boundary for the main Project Site and Hamilton Avenue Parcel North. This would prevent post-construction changes in runoff, including runoff with sediment or oil and grease, which could degrade water quality.

As discussed in more detail in Section 3.11, *Hydrology and Water Quality*, the Proposed Project would be required to comply with the NPDES General Construction Permit, San Francisco Bay Municipal Regional Permit (MRP) Provision C.3, and San Mateo Countywide Water Pollution Prevention Program Provision C.3 Stormwater Technical Guidance. The MRP requires all projects to implement best management practices and incorporate low-impact development designs to block pollution from stormwater runoff, promote infiltration, and 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, and bioretention or detention basins, among other elements. These same features would be used to treat any stormwater that flows to the offsite brackish marsh during large storm events. Therefore, because of the infrequency with which overland flows would enter offsite wetlands, the potential impact on wetland community composition or quality due to an influx of freshwater during large storm events would be considered less than significant.

Reductions in ambient light levels in wetland habitat can lead to a decrease in the amount of aquatic vegetation present, which can result in a reduction in the amount of cover and herbaceous food available in the wetland habitat. The Proposed Project would increase the maximum height of buildings on the main Project Site from approximately 34 feet to 110 feet. Therefore, the Proposed Project has the potential to affect vegetation near taller buildings because of changes in ambient lighting (i.e., shading). However, the increased height of the proposed buildings is not expected to result in a substantial change in the ambient light levels that reach nearby wetlands. The isolated forested wetlands immediately north of the main Project Site are currently bordered on the south by an area of tall trees that already provides some shade, and under the

²⁴ Sherwood Design Engineers. 2021. *Hydrology and Hydraulic Report for Willow Village, Menlo Park, California*. January 18.

Proposed Project, regardless of the height of buildings that are constructed nearby, these wetlands would still have exposure to the eastern sky, unimpeded by new buildings. Therefore, shading of this wetland under the Proposed Project is not expected to increase substantially compared with current levels.

The herbaceous seasonal wetland immediately outside the northeast corner of the Project Site is in an open area, with no substantive shading from trees or buildings. The herbaceous seasonal wetland immediately north of Hamilton Avenue Parcels North and South is currently bordered on the south by shrubs and small trees that provide a minimal amount of shade as well as two 20-foot-tall buildings, approximately 15 to 25 feet from the wetland, that also shade portions of the wetlands. Shading of both herbaceous seasonal wetlands by new buildings would reduce the amount of light received by wetland plants, thereby potentially affecting the health and growth of these plants. Therefore, some degradation of wetland habitat over time would be expected as a result. However, these wetlands would still have exposure to the eastern sky, unimpeded by new buildings; therefore, they would not be completely shaded. Because these herbaceous seasonal wetlands in the Study Area would continue to receive adequate lighting, impacts on their functions and values would be less than significant.

The brackish marsh north of the main Project Site is approximately 220 feet from the nearest proposed building and separated from the main Project Site by an approximately 25- to 40-foot-tall self-storage business. Therefore, shading of the marsh by the existing storage units currently has an effect on aquatic vegetation. The net increase in shading from the Proposed Project would be insignificant, given the main Project Site's distance from the marsh. Shade from the proposed buildings would reach the marsh for only short periods of the day when the sun is low in the sky and the ambient light is dimmer and providing less photosynthetic input. Furthermore, because of the open nature of the proposed development, with extensive open space, the Proposed Project would not result in one large, continuous shadow but would allow light to penetrate through the campus. Therefore, shading impacts on wetlands from the proposed buildings would be less than significant.

Compliance with state requirements to control the discharge of stormwater pollutants during construction under the NPDES Construction General Permit, best management practices, and post-construction measures and design features required by the MRP would reduce the Proposed Project's potential impact on the water quality of wetlands to a less-than-significant level. See Section 3.11, *Hydrology and Water Quality*.

MITIGATION MEASURES. As discussed above, the Proposed Project could affect a portion of the isolated forested wetland and herbaceous seasonal wetland along the northern edge of the main Project Site and Hamilton Avenue Parcel North during grading. Implementation of Mitigation Measures BIO-3.1, BIO-3.2, and BIO-3.3, outlined in Impact BIO-3, above, would reduce this impact to ***less than significant with mitigation***.

Impact BIO-5: Impacts on Wildlife Movement and Native Wildlife Nursery Sites. The removal of buildings, trees, shrubs, or woody vegetation and the construction of new buildings and installation of lighting could affect native migratory birds. (LTS/M)

For many species, a typical urban 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 pieces) can have a twofold impact on wildlife. First, as habitat patches become smaller, they are unable to support as many individuals (patch size). Second, the area between habitat patches may be unsuitable for wildlife species to traverse (connectivity).

All Project activities would be within an already-developed footprint that is surrounded by existing development. Therefore, the Proposed Project would not result in fragmentation of natural habitats. Furthermore, the Proposed Project would include extensive open space. Any common, urban-adapted species that currently move through the Project Site would continue to be able to do so following Project construction. The Proposed Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors.

Construction disturbance during the avian breeding season (February 1 through August 31, for most species) could result in the incidental loss of eggs or nestlings, either directly through destruction or disturbance of active nests or indirectly through nest abandonment. Given the absence of sensitive habitats on the Main Project Site, Hamilton Avenue Parcels North and South, the Willow Road Tunnel site, and the PG&E Ravenswood substation site, the habitats that are on the site support only regionally common, urban-adapted breeding birds and only a very small proportion of the species' regional populations. In addition, many birds are expected to continue to nest and forage on the main Project Site, Hamilton Avenue Parcels North and South, and the Willow Road Tunnel site after Project construction is completed. These birds are habituated to disturbance related to existing conditions at the main Project Site, Hamilton Avenue Parcels North and South, the Willow Road Tunnel site, and the PG&E Ravenswood substation site.

The Proposed Project would incorporate trees, shrubs, and forbs into the landscape design, which would provide some food and structural resources for the common, urban-adapted birds of the area as well as migrants that may use the area during spring and fall migration. However, all native bird species are protected from direct take by federal and state statutes. If the Proposed Project is implemented during the nesting season (February 1 to September 14), tree and shrub removal could result in the direct mortality of adult or young birds, the destruction of active nests, or disturbance of nesting adults, causing nest abandonment and/or loss of reproductive effort. Native bird species are protected by both state (California Fish and Game Code Sections 3503 and 3513) and federal (MBTA of 1918) laws. Any disturbance of nesting birds that results in the abandonment of active nests or the loss of active nests through vegetation or structure removal would be a potentially significant impact. In addition, the proposed buildings at the main Project Site could result in avian collision risks, as discussed in the *Willow Village Master Plan Bird-Safe Design Assessment* prepared by H.T. Harvey & Associates.²⁵ Birds at the main Project Site could also be affected by new buildings and other structures with significant glass façades.

The Proposed Project would also create approximately 20 acres of open space, consisting of paved pedestrian areas and landscape vegetation. Because of the anticipated extent of this vegetation, a greater number of landbirds, including both resident birds and migrating birds, could be attracted to the site compared to existing conditions.

Because birds do not necessarily perceive glass as an obstacle,²⁶ windows or structures that reflect the sky, trees, or other habitat may not be perceived as obstacles; therefore, birds may collide with them. Transparent windows can result in collisions when birds perceive an unobstructed flight path (e.g., at corners) or when the combination of transparent windows and interior vegetation results in attempts by birds to fly through glass to reach the vegetation. A number of factors play a role in determining the risk of bird collisions, including the amount and type of glass used, lighting, properties of the building (e.g., size, design, and orientation), type and location of vegetation around the building, and building location. Foggy conditions may

²⁵ H.T. Harvey & Associates. 2021. *Willow Village Master Plan Bird-Safe Design Assessment*. October 19.

²⁶ Sheppard, C., and G. Phillips. 2015. *Bird-Friendly Building Design*. Second edition. The Plains, VA: American Bird Conservancy. Available: https://abcbirds.org/wp-content/uploads/2015/05/Bird-friendly-Building-Guide_2015.pdf. Accessed: March 15, 2022.

exacerbate collision risks because birds may be even less able to perceive glass in the fog. The highest collision risk would most likely occur when inclement weather enters the region on a night with heavy bird migration, with clouds and fog making it difficult for birds to find high-quality stopover sites once they reach ground level.

Several architectural features of the buildings on the main Project Site would reduce the frequency of avian collisions. For instance, Project features such as overhangs and awnings may reduce the potential for bird collisions by making buildings appear more solid from a distance.^{27,28} Birds that use habitats on the main Project Site or in adjacent areas would be more likely to interpret the buildings as solid structures rather than reflected sky or vegetation. At a more localized scale, Project features would reduce collisions by blocking birds' views of glazing, particularly birds that use the trees or roof vegetation above the overhangs and awnings.

Many of the Project buildings would be articulated and designed with numerous features that would break up exterior surfaces to avoid a smooth and unbroken appearance. Well-articulated buildings are perceived by birds as solid structures, particularly as birds approach from a distance.²⁹ In addition, as discussed above, awnings and overhangs are also expected to reduce bird collisions. The Proposed Project would include landscape vegetation in a number of locations immediately adjacent to glazed façades, especially at the Elevated Park adjacent to the south façade of the atrium and in landscaped areas adjacent to the north façade of the atrium. Where landscape vegetation must be planted adjacent to buildings, some agencies recommend planting the vegetation very close to glazed façades (i.e., within 3 feet) to reduce bird collisions. This obscures reflections in the glazing from vegetation and reduces fatal collisions by reducing the birds' flight speed.^{30,31}

The other portions of the Project Site would not affect birds in the same way as the main Project Site. The buildings and structures on Hamilton Avenue Parcels North and South would be largely the same style and height as the existing buildings. In addition, the Willow Road Tunnel site would not include new structures that could confuse birds. At the PG&E Ravenswood substation, the upgrades would incorporate new utility distribution lines and transformers but no new buildings with glass façades.

The Proposed Project would also be required to comply with the City's bird-safe design requirements (as described above under Regulatory Setting), which would further reduce the risk of avian collisions on the main Project Site. Through incorporation of bird-friendly Project features, compliance with City requirements, and preparation of final architectural control plans, impacts related to bird collisions with buildings and other structures would be less than significant. The only exception to this would be at the atrium, as described in greater detail below.

²⁷ San Francisco Planning Department. 2011. *Standards for Bird-Safe Buildings*. July 14. Available: https://sfplanning.org/sites/default/files/documents/reports/bird_safe_bldgs/Standards%20for%20Bird%20Safe%20Buildings%20-%2011-30-11.pdf. Accessed: March 15, 2022.

²⁸ Sheppard, C., and G. Phillips. 2015. *Bird-Friendly Building Design*. Second edition. The Plains, VA: American Bird Conservancy.

²⁹ San Francisco Planning Department. 2011. *Standards for Bird-Safe Buildings*. July 14.

³⁰ Klem, D. 1990. Collisions between Birds and Windows: Mortality and Prevention (Colisiones de Pájaros con Ventanas: Mortalidad y Prevención). In *Journal of Field Ornithology*, 61(1):120–128. Available: <https://www.muhlenberg.edu/media/contentassets/images/academics/biology/biology/faculty/klem/aco/documents/FieldJournal-Mortality1990.pdf>. Accessed: March 15, 2022.

³¹ New York City Audubon Society, Inc. 2007. *Bird-Safe Building Guidelines*. New York, NY. May. Available: <https://www.yumpu.com/en/document/read/51763353/bird-safe-building-guidelines-new-york-city-audubon-society/2>. Accessed: March 15, 2022.

As depicted in the illustrative plan, an approximately 117-foot-tall, 129,000-square-foot glass atrium, located north of the Elevated Park within the main Project Site, would provide four levels of office and accessory space and approximately 3.7 acres of interior open space that would include paved pedestrian areas, landscape vegetation, and trees. The north side of the atrium would face open marsh and scrub habitats as well as the Bay; the south side would face the remainder of the main Project Site. A roadway, an open space area, and a bicycle park would be constructed along the north side of the atrium; the approximately 36-foot-tall Elevated Park would be constructed along the south side of the atrium. Vegetation and trees at the Elevated Park, as well as the area immediately north of the atrium, would be planted as close to the north and south façades as feasible.

As depicted in the illustrative plan, the lower approximately 12.5 feet of the atrium's south façade would consist of vertical glazing and several building entrances; the remaining areas on the atrium's north and south façades would use a network of glass panels to create a curved dome shape. At the east end, along the south façade, the atrium would be connected to the event building via a partially glazed passageway. A visitor center would be located on the ground floor below the Elevated Park at the west end of the atrium. Glass façades would surround the visitor center, contiguous with the atrium's vertical south façade. The east and west ends of the atrium would be closed off with use of large, predominantly glazed vertical façades that are depicted in the illustrative plan as approximately 45 to 50 feet tall. Because of the unique design of the atrium, bird-friendly Project features and compliance with City bird-safe design requirements would not reduce collision risks enough to avoid significant impacts under CEQA. Therefore, impacts would be potentially significant.

Construction of the Proposed Project would create new sources of light, which would emanate from fixtures for illuminating buildings, building architectural lighting, pedestrian lighting, and artistic lighting. Depending on the location, direction, and intensity of exterior lighting, light could spill into adjacent natural areas, thereby resulting in an increase in lighting compared to existing conditions. Areas south, east, and west of the Project Site are entirely developed urban habitats that do not support diverse or sensitive bird communities that might be substantially affected by illumination from the Proposed Project. Birds that inhabit the more natural areas to the north may be affected by an increase in lighting, as would birds in future vegetated open spaces on the Project Site. However, the number of shorebirds foraging near or flying over the Project Site is expected to be relatively low because shorebirds do not congregate in large numbers at or near the Project Site.

Light from the Project Site has some potential to attract and/or disorient birds, especially during inclement weather when nocturnally migrating birds descend to lower altitudes. As a result, some birds flying along the Bay at night may be attracted to the site and/or disoriented by the light, potentially causing them to collide with buildings. Certain migrant birds that use structures for roosting and foraging (e.g., swifts and swallows) could be vulnerable to collisions if they perceive illuminated building interiors as potential roosting habitat and attempt to enter the buildings through glass walls. Similarly, migrant and resident birds would be vulnerable to collisions if they perceive illuminated vegetation within buildings as potential habitat and attempt to enter through glass walls. Impacts on birds within the Project Vicinity due to artificial lights would be potentially significant.

MITIGATION MEASURE. Implementation of Mitigation Measures BIO-5.1, BIO-5.2, and BIO-5.3 would ensure that Project impacts on migratory birds would be ***less than significant with mitigation***.

BIO-5.1: Avoidance and Pre-construction Surveys for Nesting Migratory Birds.

The Project Sponsor shall implement the following measures to reduce impacts on nesting migratory birds:

- To the extent feasible, construction activities shall be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts on nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.
- If it is not possible to schedule construction activities between September 1 and January 31, then preconstruction surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests of migratory birds will be disturbed during Project implementation. Surveys shall be conducted no more than 7 days prior to the initiation of construction activities for each construction phase. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, California annual grasslands, buildings) in and immediately adjacent to the impact areas for migratory bird nests.
- If an active nest is found within trees or other potential nesting habitats that would be disturbed by construction activities, a construction-free buffer zone (typically 300 feet for raptors and 100 feet for other species) will be established around the nest to ensure that species that are protected under the MBTA and California Fish and Game Code will not be disturbed during Project implementation. The ornithologist shall determine the extent of the buffer.
- If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the Proposed Project may be removed prior to the start of the nesting season (i.e., prior to February 1). This would preclude the initiation of nests in this vegetation and prevent any potential delay for the Proposed Project because of the presence of active nests in these substrates.

BIO-5.2: Atrium Bird-safe Design Requirements.

The Project Sponsor shall implement the following measures to reduce impacts on migratory birds due to construction of the atrium:

- The Project Sponsor shall treat 100 percent of the glazing on the dome-shaped portions of the atrium's façades (i.e., all areas of the north façade and all areas of the south façade above the Elevated Park) with a bird-safe glazing treatment to reduce the frequency of collisions. This glazing shall have a Threat Factor of 15 or less.³² Because a Threat Factor is a nonlinear index, its value is not equivalent to the percent reduction in collisions that a

³² A material's Threat Factor, as assigned by the American Bird Conservancy, refers to the level of danger posed to birds, based on the birds' ability to perceive the material as an obstruction, as tested using a "tunnel" protocol (a standardized test that uses wild birds to determine the relative effectiveness of various products at deterring bird collisions). The higher the Threat Factor, the greater the risk that collisions will occur. An opaque material will have a Threat Factor of 0, and a completely transparent material will have a Threat Factor of 100. Threat Factors for many commercially available façade materials can be found at <https://abcbirds.org/wp-content/uploads/2021/01/Masterspreadsheet-1-25-2021.xlsx>.

glazing product provides. However, products with lower Threat Factors result in fewer bird collisions.

- The Project Sponsor shall treat 100 percent of the glazing on the atrium's east and west façades with a bird-safe glazing treatment to reduce the frequency of collisions. This glazing shall have a Threat Factor of 15 or less.
- Interior trees and woody shrubs shall be set back from the atrium's east and west façades as well as the non-sloped portions (i.e., perpendicular to the ground) of the south façade by at least 50 feet to reduce the potential for collisions due to the visibility of interior trees. This 50-foot distance is more than the distance used in the Project design for the north façade and the sloped portions of the south façade (e.g., 20–25 feet for the north façade). This is because of the vertical nature of the east and west façades and the non-sloped portions of the south façade, as opposed to the articulated nature of the north façade and the sloped portions of the south façade, which are expected to reduce the visibility of internal vegetation to some extent, as well as the direct line-of-sight views between interior and exterior vegetation through the east and west façades and the non-sloped portions of the south façade compared to the north façade (where internal vegetation is elevated above exterior vegetation). Interior trees and shrubs that would not be visible through the east, west, and south façades may be planted closer than 50 feet to glass façades.
- Because the glass production process can result in substantial variations in the effectiveness of bird-safe glazing, a qualified biologist will review physical samples of all glazing to be used on the atrium to confirm that the bird-safe frit will be visible to birds under various lighting conditions and expected to be effective.
- The Project Sponsor shall monitor bird collisions around the atrium for a minimum of 2 years following construction to identify any collision “hot spots” (i.e., areas where collisions occur repeatedly). A monitoring plan for the atrium shall be developed by a qualified biologist and shall include focused surveys for bird collisions from late April through May (spring migration), September through October (fall migration), and mid-November through mid-January (winter) to maximize the possibility of detecting bird collisions that might occur. Surveys of the atrium shall be conducted daily for 3 weeks during each of these periods (i.e., 21 consecutive days during each season, for a total of 63 surveys per year). In addition, for the 2-year monitoring period, surveys of the atrium shall be conducted the day following nighttime events during which temporary lighting exceed would typical levels (i.e., levels specified in the International Dark-Sky Association's defined lighting zone, LZ-2 [Moderate Ambient], from dusk until 10:00 p.m., or 30 percent below these levels from 10:00 p.m. to midnight). The applicant can assign responsibility for tracking events and notifying the biologist when a survey is needed to a designated individual who is involved in the planning and scheduling of atrium events. The timing of the 63 seasonal surveys (e.g., morning or afternoon) shall vary on the different days to the extent feasible; surveys conducted specifically to follow nighttime events shall be conducted in the early morning.
- At a frequency of no less than every 6 months, a qualified biologist shall review the bird collision data for the atrium in consultation with the City to determine whether any potential hot spots are present (i.e., if collisions have occurred repeatedly at the same location). A potential *hot spot* is defined as a cluster of three or more collisions occurring within one of the 3-week monitoring periods described above at a given location at the atrium. The

location shall be identified by the qualified biologist, as makes sense for the observed collision pattern, and may consist of a single pane of glass, an area of glass adjacent to a landscape tree or light fixture, the 8,990-square-foot vertical façade beneath the Elevated Park, the façade adjacent to the vegetation at the Elevated Park, the atrium's east façade, the atrium's west façade, or another defined area where the collision pattern is observed. The definition of location shall be based on observations of collision patterns and the architectural, lighting, and/or landscape features that contributed to the collisions and not arbitrarily determined (e.g., by assigning random grids). If any such potential hot spots are found, the qualified biologist shall provide an opinion as to whether the potential hot spots will affect bird populations over the long term to the point that additional measures (e.g., light adjustments, planting of vegetation) will be needed to reduce the frequency of bird strikes at the hot spot in order to reduce impacts to a less-than-significant level under CEQA (i.e., whether it constitutes an actual hot spot). This determination shall be based on the number of birds and the species of birds that collide with the atrium over the monitoring period. In addition, a hot spot is automatically defined if a cluster of five or more collisions is identified at a given location at the atrium within one of the 3-week monitoring periods described above. If a hot spot is identified, additional measures will be implemented at the potential hot spot at the atrium; these may include one or more of the following options in the area of the hot spot, depending on the cause of the collisions:

- Adding a visible bird-safe frit pattern, netting, exterior screens, art, printed sheets, interior shades, grilles, shutters, exterior shades, or other features to untreated glazing (i.e., on the façade below the Elevated Park) to help birds recognize the façade as a solid structure.
 - Installing interior or exterior blinds on buildings within the atrium to prevent light from spilling outward through glazed façades at night.
 - Reducing lighting by dimming fixtures, redirecting fixtures, turning lights off, and/or adjusting the programmed timing for dimming/shutoff.
 - Replacing certain light fixtures with new fixtures to increase shielding or redirect lighting.
 - Adjusting or reducing lighting during events.
 - Adjusting the timing of events to reduce the frequency during certain times of year (e.g., spring and/or fall migration) when relatively high numbers of collisions occur.
 - Adjusting landscape vegetation by removing, trimming, or relocating trees or other plants (e.g., moving them farther from glass) or blocking birds' views of vegetation through glazing (e.g., using a screen or other opaque feature).
- If modifications to the atrium are implemented to reduce collisions at a hot spot, 1 year of subsequent focused monitoring of the hot-spot location shall be performed to confirm that the modifications effectively reduced bird collisions to a less-than-significant level under CEQA. In the event that a hot spot is detected when there is less than 1 year remaining in the initial 2-year monitoring period, then the 1 year of subsequent monitoring at that hot spot would extend beyond the 2-year monitoring period described above.

BIO-5.3: Lighting Design Requirements.

The Project Sponsor shall implement the following measures to reduce lighting impacts on migratory birds:

- 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 prevent 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 the objects at which they are directed (e.g., trees and buildings) and no light shines 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.
- All lighting shall be fully shielded to prevent it from shining outward and toward Bay habitats to the north. No light trespass shall be permitted more than 80 feet beyond the Project Site's northern property line (i.e., beyond the Dumbarton Rail Corridor).
- Exterior lighting shall be minimized (i.e., outdoor lumens shall be reduced by at least 30 percent, 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 compliance with Menlo Park Municipal Code.
- Temporary lighting that exceeds minimal site lighting requirements may be used for nighttime social events. This lighting shall be switched off no later than midnight. No exterior up-lighting (i.e., lighting that projects upward above the fixture, including spotlights) shall be used during events.
- Lights shall be shielded and directed so as not to spill outward from the elevator/stair towers and into adjacent areas.
- Interior or exterior blinds shall be programmed to close on north-facing windows of buildings within the atrium from 10:00 p.m. to sunrise to prevent light from spilling outward.
- Accent lighting within the atrium shall not be used to illuminate trees or vegetation. Alternatively, the applicant shall provide documentation to the satisfaction of a qualified biologist that the illumination of vegetation and/or structures within the atrium by accent lighting and/or up-lighting will not make these features more conspicuous to the human eye from any elevation outside the atrium compared to ambient conditions within the atrium. The biologist shall submit a report to the City following completion of the lighting design, documenting compliance with this requirement.

Impact BIO-6: Conflicts with Any Local Policies or Ordinances that Protect Biological Resources. The Project would result in conflicts with the Menlo Park Municipal Code. (LTS/M)

Municipal Code Chapter 13.24, Heritage Trees. There are currently 784 trees on the main Project Site, including 274 trees that qualify as heritage trees under the City's Heritage Tree Ordinance.³³ The 784 trees consist of 40 different tree species, the most numerous of which are Canary Island pine (*Pinus canariensis*) and crepe myrtle (*Lagerstroemia* spp.) Five native (but planted and, therefore, also ornamental) tree species on the Project Site include Monterey cypress (*Hesperocyparis macrocarpa*),

³³ SCBA Tree Consulting. 2020. *Tree Survey and Valuation of Heritage Trees*. Prepared for Signature Development Group. August 27.

Monterey pine (*Pinus radiata*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), and coast redwood (*Sequoia sempervirens*).³⁴ Under the City's Heritage Tree Ordinance, heritage oak trees are regulated differently from other species of heritage trees (refer to the *Local* regulatory section, above). Per the most recent Project plans, Project arborist report, and heritage tree removal permits, 760 trees, including 266 heritage trees and 494 non-heritage trees, would be removed for construction of the Proposed Project on the main Project Site. Eight heritage trees and 16 non-heritage trees would remain in place.

On Hamilton Avenue Parcels North and South, there are currently 141 trees, including 18 that qualify as heritage trees under the City's Heritage Tree Ordinance. The street trees along the south side of Hamilton Avenue were not surveyed and are not included in the total number of trees. The 18 heritage trees comprise two species: 13 coast redwoods and five coast live oaks. The most numerous tree species on Hamilton Avenue Parcels North and South are Chinese pistache (*Pistacia chinensis*) (32 trees, including 16 City street trees) and red maple (*Acer rubrum*) (19 trees).³⁵ At Hamilton Avenue Parcels North and South, approximately 61 trees, including street trees and three heritage trees, would be removed to accommodate proposed changes; new landscaping would be provided along street frontages.

Per Menlo Park Municipal Code Section 13.24, Heritage Trees, permits from the City's Director of Public Works, or his or her designee, and payment of a fee are required for the removal of any tree that meets the definition of *heritage tree*. The Proposed Project would comply with the City's Heritage Tree Ordinance by obtaining a permit from the City to remove protected trees and paying any applicable fee. The Proposed Project would provide approximately 822 replacement trees on the main Project Site for the heritage trees; therefore, a greater number of trees would be planted than removed. The replacement trees would be required to meet the minimum valuation requirements for replacement trees. Impacts related to conflicts with local policies or ordinances that protect heritage trees would be ***less than significant***.

Municipal Code Chapters 16.43.140(6) and 16.45.130(6), Bird Safe Design. The Proposed Project would also be subject to Sections 16.43.140(6) (with respect to the O District) and 16.45.130(6) (with respect to the RMU District) of the Menlo Park Municipal Code, which requires bird-friendly designs for new buildings. Development of the Proposed Project would result in the replacement of existing multi-story buildings with new multi-story buildings on the main Project Site. The new buildings would incorporate glazing in their façades. However, glass windows and building façades can result in injury or mortality for birds because of collisions. Birds do not perceive glass as an obstruction the way humans do. Therefore, they may collide with glass when sky or vegetation is reflected (i.e., if they see a glass as sky or a vegetated area); when transparent windows allow them to perceive an unobstructed flight path, (e.g., at corners); and when the combination of transparent glass and interior vegetation (e.g., in planted atria) results in attempts by birds to fly through glass.

As discussed above in Impact BIO-5, the Proposed Project would comply with the majority City bird-safe design requirements provided in Menlo Park Municipal Code Sections 16.43.140(6) and 16.45.130(6), which include appropriate measures to reduce bird collisions. A project may receive a waiver from the requirements with submittal of a site-specific evaluation from a qualified biologist and review and approval by the Planning Commission. Waivers are requested for the Proposed Project only where strict adherence to the City's bird-safe design requirements would not be necessary to reduce impacts to less-than-significant levels under CEQA and would not substantively reduce bird collision risks beyond

³⁴ Ibid.

³⁵ SBCA Tree Consulting. 2021. *Tree Survey*. April 1.

alternative City measures, as described in the *Willow Village Master Plan Bird-Safe Design Assessment* prepared by H.T. Harvey & Associates. These tailored alternative bird-safe design measures, which address collision risks at Project buildings, are derived from the City's bird-safe design requirements, with appropriate waivers.

Compliance with the bird-friendly design requirements of the Menlo Park Municipal Code, with appropriate waivers, would reduce the number of bird collisions with proposed buildings. However, because of the unique design of the atrium, bird-friendly Project features and compliance with City bird-safe design requirements would not reduce collision risks enough to avoid significant impacts under CEQA. Therefore, the impacts would be potentially significant. However, the atrium would comply with the City's bird-safe design requirements through bird-friendly glazing restrictions, occupancy sensors, and the appropriate placement of buildings. As to requirements pertaining to glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners, as well as requirements pertaining to transparent glass at the rooflines of buildings, the Project proposes implementation of certain alternative City measures to ensure that the Proposed Project meets the intent of bird-safe building designs and addresses high-risk collision hazards.

The proposed alternative measures to the requirements include:

- All glazed features of the atrium with clear sight lines between vegetation on either side of the features (e.g., at glazed corners) shall be 100 percent treated with a bird-safe glazing treatment. Transparent building corners shall be treated at all locations where it is possible to see through to the other side of the visitors center.
- If free-standing glass railings are included in the Project design in exterior areas adjacent to the atrium (e.g., at the Elevated Park), all glazing on the free-standing glass railings shall be 100 percent treated with a bird-safe glazing treatment. Specifically, all glazing on the free-standing glass railings in exterior areas adjacent to the atrium shall have a Threat Factor less than or equal to 15. This Threat Factor is relatively low (and the effectiveness of the bird-safe treatment correspondingly high) because of the relatively high risk associated with bird collisions at free-standing glass railings.
- All transparent glass at the rooflines of the atrium adjacent to roof decks (i.e., the Elevated Park) shall be 100 percent treated with a bird-safe glazing treatment. The only untreated glazing on the atrium shall be on the vertical façade beneath the Elevated Park, which would not create a collision hazard because of landscape vegetation on roofs.

These alternative measures would reduce bird collisions at locations where bird collisions would be most likely to occur and would meet the objective of City requirements.

Through compliance with the bird-safe design requirements of Menlo Park Municipal Code Sections 16.43.140(6) and 16.45.130(6), from which no waiver is requested; implementation of alternative measures in lieu of the two requirements described above; and Mitigation Measure BIO-5.2, Project impacts due to bird collisions at the atrium would be ***less than significant with mitigation***.

Compliance with General Plan Policy OSC1.3, Sensitive Habitats. City General Plan Policy OSC1.3, Sensitive Habitats, requires new development on or near sensitive habitats to (1) provide a baseline assessment prepared by qualified biologists and specify requirements relative to the baseline assessments, (2) consult with appropriate regulatory and resource agencies, (3) incorporate appropriate avoidance and minimization measures, and (4) obtain necessary permits/authorizations. Furthermore, Mitigation Measure BIO-1 of the ConnectMenlo EIR specifies that the required biological resources assessment must address a number of specific requirements. As discussed throughout this

section, the Master Plan BRA³⁶ and the Tunnel BRA³⁷ have been prepared by H.T. Harvey & Associates for the Proposed Project and peer reviewed by ICF. The existing setting, Project analysis, and mitigation measures outlined in the BRAs are incorporated throughout this section.

The following summarizes the Proposed Project's compliance with the requirements of City General Plan Policy OSC1.3 and ConnectMenlo EIR Mitigation Measure BIO-1:

- A baseline biological resources report is required to provide a determination regarding whether any sensitive biological resources, including jurisdictional wetlands and waters, essential habitat for special-status species, and sensitive natural communities, are present on the Project Site or any adjacent undeveloped lands that could be affected by the Proposed Project, including lands on the Refuge. In compliance with this requirement, the Master Plan BRA and Tunnel BRA, which have been summarized throughout this section, describe the biotic habitat types present in the Study Area. The BRAs also discuss the potential for the habitats to support special-status plants and animals and analyze the potential for special-status species to occur on the Study Area or close enough to be affected by Project activities. The BRAs analyze the potential impacts on special-status species. No plant or animal species listed as threatened or endangered by the USFWS or CDFW are expected to occur within the Study Area. Furthermore, no species designated as a species of special concern is expected to breed in the Study Area.

The BRAs analyze the presence of sensitive habitats in the Project Vicinity and the potential for the Proposed Project to result in impacts on such habitats. No habitats under the jurisdiction of the USFWS, CDFW, USACE, or RWQCB were determined to be present on the Project Site. However, the 0.07 acre of isolated forested wetland (and an additional 0.13-acre area where the canopy of the willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) and the 0.07 acre of herbaceous seasonal wetlands immediately north and northeast of the Project Site could be affected by construction. Implementation of Mitigation Measures BIO-2.1 and BIO-3.1 through BIO-3.3 would reduce impacts on sensitive/jurisdictional habitats to less-than-significant levels.

- The baseline biological resources report is required to incorporate guidance from relevant regional conservation plans related to determining the potential presence or absence of sensitive biological resources. As described above, the BRAs analyzed the potential for special-status plant or animal species to occur on the Project Site. This analysis incorporates information from the Refuge Comprehensive Conservation Plan and Environmental Assessment (U.S. Fish and Wildlife Service 2012), which includes a discussion of all the special-status species potentially occurring on the Refuge.
- The baseline biological resources report is required to include an evaluation of the potential effects of the Proposed Project on sensitive biological resources. The Proposed Project's potential to result in significant impacts on sensitive biological resources was analyzed above. Based on the analysis, it was determined that the Proposed Project would not result in significant impacts on special-status plant or animal species. The Proposed Project could result in impacts on sensitive habitats under the jurisdiction of USACE and the RWQCB—specifically, the small areas of isolated forested wetland (0.07 acre plus an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) as well as the herbaceous seasonal

³⁶ H.T. Harvey & Associates. 2021. *Willow Village Master Plan Biological Resources Report*. Los Gatos, CA. Prepared for Peninsula Innovation Partners, Menlo Park, CA. December 21. Unpublished.

³⁷ H.T. Harvey & Associates. 2021. *Willow Village Tunnel and North Ramp Biological Resources Assessment*. Los Gatos, CA. Prepared for Signature Development Group, Oakland, CA. July 2. Unpublished.

wetlands (0.07 acre) immediately north and northeast of the site. Implementation of Mitigation Measures BIO-3.1 through BIO-3.3 would reduce impacts on sensitive/jurisdictional habitats to less-than-significant levels.

- The baseline biological resources report is required to include avoidance, minimization, and mitigation measures for adverse impacts. Mitigation Measures BIO-3.1 through BIO-3.3 are necessary to reduce impacts to less-than-significant levels; otherwise, no mitigation measures are necessary to avoid significant impacts related to bird safety. Nevertheless, all native bird species are protected from direct take by federal and state statutes. Therefore, recommended avoidance and minimization measures are provided to ensure that Project activities comply with the MBTA and California Fish and Game Code.
- Per ConnectMenlo Mitigation Measure BIO-1 of the ConnectMenlo EIR, if sensitive biological resources are determined to be present on the Project Site or any adjacent parcel containing natural habitat, coordination with the appropriate regulatory and resource agencies must occur. The Proposed Project could result in impacts on sensitive habitats under the jurisdiction of USACE and RWQCB—specifically, the small areas of isolated forested wetland (0.07 acre plus an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) and the herbaceous seasonal wetlands (0.07 acre) immediately north and northeast of the site. As discussed in Mitigation Measure BIO-3.1, the Proposed Project would avoid and minimize impacts on these features to the extent feasible. If all direct impacts can be avoided so that no clearing of wetland vegetation or fill within the wetlands occurs, no regulatory permitting related to these features will be necessary, even if the habitats are jurisdictional. However, if these habitats are jurisdictional and will be affected by vegetation clearing or fill, the Project Sponsor shall obtain the necessary Section 404/401 permits from USACE and the RWQCB. The Proposed Project would not result in impacts on plant or animal species listed as threatened or endangered by USFWS or CDFW; therefore, coordination with regulatory agencies regarding impacts on special-status species is not warranted.
- Per ConnectMenlo Mitigation Measure BIO-1, where jurisdictional waters or federally or state-listed special-status species would be affected by the Proposed Project, appropriate authorizations shall be obtained by the Project Sponsor. As described above, the Project Sponsor shall obtain any necessary Section 404/401 permits from USACE and RWQCB if the offsite isolated forested wetland and/or herbaceous seasonal wetlands would be affected by vegetation clearing or fill. In addition, the Proposed Project would be required to comply with Mitigation Measures BIO-3.1, BIO-3.2, and BIO-3.3 to reduce impacts on wetlands. The Proposed Project would not result in impacts on plant or animal species listed as threatened or endangered by USFWS or CDFW. The Proposed Project would comply with the City's Heritage Tree Ordinance by obtaining a permit from the City to remove protected trees and paying any applicable fee.

Provided that the Proposed Project incorporates the mitigation measures described in this EIR, the Proposed Project would not conflict with City General Plan Policy OSC1.3. The Master Plan BRA and the Tunnel BRA represent compliance with ConnectMenlo EIR Mitigation Measure BIO-1 by providing all information required by that mitigation measure for a biological resources assessment. Therefore, impacts would be ***less than significant with mitigation***.

Cumulative Impacts

Impact C-BIO-1: Cumulative Biological Resources Impacts. Cumulative development would not result in a significant cumulative impact on biological resources, and the Proposed Project would not be a cumulatively considerable contributor to such a cumulative impact. (LTS/M)

Summary of Analysis in the ConnectMenlo EIR

The ConnectMenlo EIR analyzed the potential for cumulative impacts that could result from implementing the updates to the Land Use and Circulation Elements and the M-2 Area Zoning Update in combination with other past, present, and probable future projects in Impact BIO-7 (pages 4.3-28 and 4.3-29). The ConnectMenlo EIR found that potential impacts from proposed development on biological resources tend to be site specific. The overall cumulative effect depends on the degree to which significant vegetation and wildlife resources are protected on a particular site. To some degree, cumulative development contributes to an incremental reduction in the amount of wildlife habitat, particularly for birds and larger mammals. New development in the region could result in further conversion of natural habitats to urban and suburban conditions, thereby limiting the existing habitat values of the surrounding area. However, the ConnectMenlo EIR determined that biological assessments for future projects involving specific development on or near sensitive habitats, as required under ConnectMenlo EIR Mitigation Measure BIO-1 and compliance with City General Plan policies and zoning regulations, would ensure that important biological resources would be identified, protected, and properly managed and prevent any significant adverse development-related impacts, including development of the remaining undeveloped lands in the planning area and surrounding incorporated and unincorporated lands. Therefore, implementation of Mitigation Measure BIO-1 would reduce cumulative impacts to less than significant.

Cumulative Impacts with the Proposed Project

Consistent with the ConnectMenlo EIR, the geographic context for cumulative biological resources impacts with the Proposed Project considers the degree to which significant vegetation and wildlife resources would be protected at the Project Site and further considers the ConnectMenlo planning area, surrounding incorporated and unincorporated lands, and the region.

As stated above, the ConnectMenlo EIR considers cumulative impacts to biological resources to be less than significant with implementation of ConnectMenlo EIR Mitigation Measure BIO-1. This mitigation measure has been implemented for the Proposed Project through preparation of the Master Plan BRA and Tunnel BRA by H.T. Harvey & Associates, as discussed throughout this section. The Master Plan BRA and Tunnel BRA, as well as the Bird-Safe Design Assessment, all prepared by H.T. Harvey & Associates, outline mitigation measures to reduce Project impacts on biological resources. Mitigation Measures BIO-2.1, BIO-3.1 through BIO-3.3, and BIO-5.1 through BIO-5.3 would mitigate impacts on sensitive regulated habitats, minimize impacts on nesting birds, and reduce bird collisions. In addition, the City General Plan contains conservation measures that would benefit biological resources as well as measures to avoid, minimize, or mitigate impacts on such resources. All other projects within the Bayfront Area of Menlo Park would also be required to implement City General Plan measures and ConnectMenlo EIR Mitigation Measure BIO-1.

The Proposed Project would not result in a substantial change in the ConnectMenlo project and would not cause new or substantially more severe significant biological resources impacts than those analyzed in the ConnectMenlo EIR. Therefore, consistent with the conclusions in the ConnectMenlo EIR, with respect to biological resources, the Proposed Project in combination with past, present, and reasonably foreseeable future projects would result in cumulative impacts that would be ***less than significant with mitigation***. No further mitigation measures would be required.