3.8 Biological Resources

This section describes the affected environment and regulatory setting for biological resources related to the Project. It also describes the potential impacts on biological resources that would result from implementation of the Project and feasible mitigation measures that would reduce these impacts. This section is based on a biological resources survey conducted by ICF International on August 17, 2015. The purpose of the biological resources survey was to determine if the Project would affect any wetlands and/or habitat that could support special-status species known in the San Francisco Bay (Bay) region and document any occurrences of those species if observed during the field survey.

Issues identified in response to the Notice of Preparation (NOP) (Appendix 1) were considered in preparing this analysis. Applicable issues that were identified include increased predator access to the nearby Don Edwards Bay National Wildlife Refuge (Refuge) and Bay due to the proposed bicycle/pedestrian bridge over Bayfront Expressway/State Route 84 (Bayfront Expressway) as well as other indirect impacts on native wildlife in the Refuge and the Bay.

Existing Conditions

Regulatory Setting

Federal

Endangered Species Act

The federal Endangered Species Act (ESA) was enacted in 1973. Under the ESA, the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 United States Code [USC] 1533[c]). The ESA is administered by both the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS). NMFS is accountable for animals that spend most of their lives in marine waters, including marine fish, most marine mammals, and anadromous fish, such as Pacific salmon. USFWS is accountable for all other federally listed plants and animals.

Pursuant to the requirements of ESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present and whether the project would have a potentially significant impact on such species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the ESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3][4]). Therefore, project-related impacts on these species or their habitats would be considered significant and would require mitigation.

Projects that would result in "take" (i.e., kill, harm, harass, etc.) of any federally listed threatened or endangered species are required to obtain authorization from NMFS and/or USFWS through either Section 7 (interagency consultation) or Section 10(a) (incidental take permit) of the ESA, depending on whether the federal government is involved in permitting or funding the project. The Section 7 authorization process is used to determine if a project with a federal nexus would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species. The Section 10(a) process allows take of endangered species or their habitats in non-federal activities.

Migratory Bird Treaty Act of 1918

The federal Migratory Bird Treaty Act (MBTA) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 Code of Federal Regulations [CFR] 21 and 50 CFR 10). Most actions that result in taking or in permanent or temporary possession of a protected species constitute MBTA violations. Examples of permitted actions that do not violate MBTA are the possession of a hunting license to pursue specific game birds, legitimate research activities, display in zoological gardens, bird-banding, and other similar activities. USFWS is responsible for overseeing compliance with MBTA, and the U.S. Department of Agriculture's Animal Damage Control Officer makes recommendations on related animal protection issues.

Clean Water Act

The federal Clean Water Act (CWA) is the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations and establishes permit review mechanisms to enforce them. Most CWA provisions are at least indirectly relevant to the management and protection of biological resources because of the link between water quality and ecosystem health. The portions that are most directly relevant to biological resources management are contained in Section 404, which regulates the discharge of dredged and fill materials into waters of the United States (comprising wetlands and other waters of the United States), which include the following water bodies:

- All areas within the ordinary high-water mark of a stream, including non-perennial streams with a defined bed and bank and any stream channel that conveys natural runoff, even if it has been realigned.
- Seasonal and perennial wetlands, including coastal wetlands.

Section 404 requires project proponents to obtain a permit from the U.S. Army Corps of Engineers (USACE) for all discharges of dredged or fill material into waters of the United States, including streams, ponds, and wetlands, before proceeding with a proposed activity. CWA Section 401 requires that applicants for a Section 404 permit must first obtain certification from the Regional Water Quality Control Board (RWQCB) that a project will comply with state water quality standards.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act requires consultation by federal agencies with USFWS when the waters of any stream or other body of water are proposed, authorized, permitted, or licensed to be impounded, diverted, or otherwise controlled or modified under a federal permit or license (16 USC 661–667[e]).

Most USFWS comments on applications for permits under CWA Section 404 are conveyed to USACE through the consultation process required by this coordination act. This act may apply to the Project (e.g., through USACE permitting for the Project).

USFWS provides advisory comments and recommends mitigation measures to avoid impacts on wetlands or to modify activities that may directly affect wetlands. Mitigation recommended by USFWS may include restoring or creating habitat to avoid a net loss of wetland functions and values. Although consultation with USFWS is required, USACE is not required to implement FWS recommendations.

State

California Endangered Species Act

The California Endangered Species Act (CESA) was enacted in 1984. Under the CESA, the California Fish and Game Commission (CFGC) has the responsibility for maintaining a list of threatened species and endangered species. Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present and determine whether the project would have a potentially significant impact on such species. In addition, the California Department of Fish and Wildlife (CDFW) encourages informal consultation on any project that may affect a candidate species. The CESA prohibits the take of California listed animals and plants in most cases, but CDFW may issue incidental take permits under special conditions.

California Native Plant Protection Act

Regarding rare plant species, the CESA defers to the Native Plant Protection Act (NPPA) of 1977, which prohibits importing rare and endangered plants into California, taking rare and endangered plants (in certain circumstances), and selling rare and endangered plants. State-listed plants are protected mainly in cases where state agencies are involved in projects under the California Environmental Quality Act (CEQA). The NPPA does not prohibit take of rare and endangered plants incidental to possession or sale of real estate (California Fish and Game Code Section 1908); consequently, it does not prohibit removal of a rare or endangered plant in the course of development of land but rather only in the context or removal of the plant for the purposes of sale. Owners of land with known rare or endangered species are required to notify CDFW of plans to change land use a minimum of 10 days prior to the change to allow CDFW time to salvage the plants. However, if CDFW fails to respond within these 10 days, then the landowner may proceed with the land use change (California Fish and Game Code Section 1913(c)).

California Fish and Game Code

CDFW maintains lists of Species of Special Concern (SSC), species that must receive special attention from federal agencies during environmental review, although they are not otherwise protected under the ESA. Project-related impacts on such species would also be considered significant under the State CEQA Guidelines Section 15380 and would require mitigation.

The California Fish and Game Code provides protection from take for a variety of species, referred to as *fully protected species*. Section 3511 lists fully protected birds, Section 3515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians and reptiles. The California Fish and Game Code, Section 86, defines take as “hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill.” Except for take related to scientific research, all take of fully protected species is prohibited.

Sections 3503 and 3800 of the California Fish and Game Code prohibit the “take, possession, or destruction of birds, their nests, or eggs” and the take of nongame birds, respectively. Section 3503.5 specifically prohibits the take, possession, or destruction of birds of prey (hawks, eagles, owls, and allies, often referred to as "raptors") and their nests. Human disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered “take.” Removal of vegetation is the most common action that can lead to a violation of these code sections.

California Species of Special Concern

CDFW maintains administrative lists of SSC, species that carry no special legal status but are considered to be at risk by CDFW; state, local, and federal governmental entities; regulators; land managers; planners; consulting biologists; and others. CDFW's Wildlife Branch, under its Nongame Wildlife Program, is responsible for producing and updating SSC publications for mammals, birds, reptiles, and amphibians. CDFW's Fisheries Branch is responsible for updates to the Fish SSC document. Section 15380 of the State CEQA Guidelines clearly indicates that SSC should be included in an analysis of project impacts if it can be shown that they meet the sensitivity criteria outlined therein. When analyzing the significance level of a project's impact on SSC, analysts typically consider factors such as population-level effects, proportion of the taxon's range affected by the project, regional effects, and impacts on habitat features necessary for survival.

Sensitive Natural Communities

Special-status or sensitive natural communities (vegetation types) have limited distribution statewide or within a county or region. CDFW's Vegetation Classification and Mapping Program (VegCAMP) works to classify and map the vegetation of California and determine the rarity of vegetation types. The current version of VegCAMP's List of Vegetation Alliances and Associations (or Natural Communities List[1]) indicates which communities are currently considered to be rare or highly imperiled. Communities with a state rarity ranking of S1–S3 (based on NatureServe's Heritage Methodology) are considered rare or imperiled, and impacts on such communities may be considered significant under CEQA.

Local

City of Menlo Park Municipal Code Chapter 13.24

The Project would be subject to the City of Menlo Park (City) Municipal Code (Municipal Code), Chapter 13.24,[2] which establishes regulations for the preservation of heritage trees. Chapter 13.24 defines heritage trees as:

- A tree or group of trees of historical significance, special character, or community benefit that have been specifically designated by resolution of the City Council;
- An oak tree (*Quercus* sp.) that is native to California and has a trunk with a circumference of 31.4 inches (diameter of 10 inches) or more, measured at 54 inches above natural grade. Trees with more than one trunk shall be measured at the point where the trunks divide, with the exception of trees that are under 12 feet in height, which will be exempt from this section; and
- All trees other than oaks that have a trunk with a circumference of 47.1 inches (diameter of 15 inches) or more, measured 54 inches above natural grade. Trees with more than one trunk shall be measured at the point where the trunks divide, with the exception of trees that are less than 12 feet in height, which are exempt from the ordinance (Ord. 928, Section 1 (part), 2004).

As required by the City's Municipal Code, tree surveys shall be conducted by an International Society of Arboriculture (ISA) certified arborist, and a tree report and map shall be prepared showing the locations of all pertinent trees prior to initiation of construction activities. Any work performed within an area 10 times the diameter of the tree (i.e., the tree protection zone) shall require submittal of a tree protection plan for review and approval by the Community Development Director or his/her designee

[1] California Department of Fish and Game. 2010. *List of Vegetation Alliances and Associations*. Vegetation Classification and Mapping Program. Sacramento, CA. September. Accessed: August 21, 2015.

[2] City of Menlo Park. 2010. *Menlo Park Municipal Code*. Section 16.46.030(7). December 14, 2010.

prior to issuance of any permit for grading or construction and shall be prepared by a certified arborist. Removal of heritage trees requires obtaining an appropriate permit from the Director of Public Works or his/her designee and payment of a fee. Applicants are required to submit a site plan with the Heritage Tree Removal Application, even if they have submitted a site plan to the City for a planning or building permit. The site plan facilitates the review by the City Arborist. For removals of two or more trees, applicants are required to submit a planting plan, indicating the species, size, and location of the proposed replacement trees on a site plan. Heritage tree permits related to construction will be charged for City-retained arborist expenses.

City of Menlo Park General Plan

City of Menlo Park General Plan. The following policies from the Open Space Element of the general plan are relevant to biological resources and the Project.

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 OSC1.3: 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 requires re-vegetation of disturbed natural habitat areas with native or non-invasive naturalized species.

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 scenic enjoyment and recreation opportunities as well as conservation education opportunities related to the open Bay, the sloughs, and the marshes.

Policy OSC1.15: Heritage Trees. Protect Heritage Trees, including during construction activities, through enforcement of the Heritage Tree Ordinance (Chapter 13.24 of the Municipal Code).

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

ConnectMenlo General Plan Update. The City General Plan (Land Use and Circulation Elements) and M-2 Area Zoning Update, also known as ConnectMenlo, is under way. Although not yet adopted, the following draft policies in ConnectMenlo pertain to the Project and are identified for informational purposes.

Policy LU-6.2: Open Space in New Development. Require new nonresidential, mixed-use, and multiple-dwelling development of a certain minimum scale to provide ample open space in the form of plazas, greens, community gardens, and parks whose frequent use is encouraged through thoughtful placement and design.

Policy LU-6.11: Bayfront Development. Allow development near the Bay only in already-developed areas.

Environmental Setting

The existing TE Connectivity Campus is bordered by Bayfront Expressway to the north, Facebook Building 20 to the east, the Dumbarton Rail Corridor to the south, and Chilco Street to the west and south. The Project site includes the existing buildings, paved parking lots, and associated ornamental

landscaping on the TE Connectivity Campus as well as an area on the north side of Bayfront Expressway, south of the existing San Francisco Bay Trail (Bay Trail) where the proposed bicycle/pedestrian bridge would touch down. The surrounding area comprises residential and commercial development to the east, west, and south and the Refuge to the north.

The Project site is relatively flat. Elevations on the site range from 7 to 10.5 feet North American Vertical Datum (NAVD). The Project site is built on Bay fill lands that formerly consisted of marshes, both saltwater and brackish water. The Natural Resource Conservation Service has mapped soils on the majority of the Project site as Urban Land–Orthents (reclaimed complex, 0 to 2 percent slopes) as well as Novato Clay (0 to 1 percent slopes) near the Project's boundary with Bayfront Expressway. Both Urban Land–Orthents and Novato Clay are generally associated with former tidal flats as well as salt marshes.

There are currently 770 trees at the Project site, including 274 trees that qualify as heritage trees under the City's Heritage Tree Ordinance.[3,4] Approximately 35 tree species are located on the Project site, with the most represented species being London plane (*Platanus x hispanica*), myoporum (*Myoporum laetum*), olive (*Olea europea*), Monterey pine (*Pinus radiata*), and Aleppo pine (*Pinus halepensis*). Other types of vegetation observed at the Project site include one English ivy (*Hedera helix*), prickly lettuce (*Lactuca serriola),* stinkwort (*Dittrichia graveolens*), fringed willowherb (*Epilobium ciliatum*), *Cotoneaster* sp., rosemary (*Rosmarinus officinalis*), iceplant (*Carpobrotus edulis*), cheeseweed (*Malva parviflora*), horseweed (*Conyza canadensis*), everlasting (*Pseudognaphalium* sp.), California poppy (*Eschscholzia californica*), and rough cat's ear (*Hypochaeris radicata*) growing in the pavement cracks and unpaved disturbed areas.

Developed areas have lower value for wildlife because of greater use by people and vegetation maintenance in these areas. Wildlife species that use developed habitats are typically adapted to a higher level of disturbance. Within the Project site, the quality of the habitat for wildlife is poor because of the lack of large, mature trees, water, and areas of natural vegetation. Wildlife species observed on the Project site include western scrub jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), and European starling (*Sturnus vulgaris*). Other generalist species that have adapted to urban environments and are expected to occur on the Project site include raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), roof rat (*Rattus rattus*), Norway rat (*Rattus norvegicus*), feral and domestic cats (*Felis catus*), common raven (*Corvus corax*), American crow (*Corvus brachyrhynchos*), and striped skunk (*Mephitis mephitis*). Raptors could also nest on the electric transmission towers located on the northern edge of the Project site at the boundary with Bayfront Expressway; no existing raptor nests were observed on these towers during the site visit on August 17, 2015.

The portion of the Refuge adjacent to the Project site includes primarily salt marsh and peripheral halophyte marsh habitat. It provides suitable foraging, roosting, and nesting habitat for a variety of shorebirds, including western snowy plover (*Charadrius alexandrines nivosus*), least terns (*Sternula antillarum*), black skimmers (*Rynchops niger*), Forster's terns (*Sterna forsteri*), Caspian terns (*Hydroprogne caspia*), and other piscivorous birds. Habitat for Ridgeway's rail and salt-marsh harvest mouse is limited because of the narrow tidal marsh areas.[5]

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[3] SCBA Tree Consulting. 2015. *Tree Survey at 301–309 Constitution Drive.* December 21, 2015.

[4] City of Menlo Park. 2010. *Menlo Park Municipal Code*. Section 16.46.030(7). December 14, 2010.

[5] H.T. Harvey Associates. 2005. *Biology and Habitats Existing Conditions Report*. Prepared for the California State Coastal Conservancy, U.S. Fish and Wildlife Service, and California Department of Fish and Game. March. Available <http://www.southbayrestoration.org/pdf_files/Biology_Habitats_Existing_Conditions.3.25.05.pdf>.

Wetlands and Non-Wetland Waters of the United States

As described above, the Project site is built on Bay fill and is therefore located on historic saltwater or brackish water marshes that were filled in the 1960s to create more land for development. Although such Bay fill lands can sometimes revert to wetland conditions, the existing Project site is paved, landscaped, or otherwise graded; therefore, no wetlands or non-wetland waters of the United States are present. There is a large concrete drainage ditch on the south side of Bayfront Expressway adjacent to, but outside of, the Project site's boundary.

Special-Status Species

A list of special-status plant and wildlife species that have the potential to occur in the vicinity of the Project site was compiled from a California Natural Diversity Database (CNDDB) query[6] for the area with a 2-mile radius; USFWS[7] species list databases; the California Native Plant Society[8] (CNPS) *Online Inventory of Rare and Endangered Plants,* as shown on the U.S. Geological Survey's Palo Alto 7.5-minute quadrangle map; and other relevant sources. The results of these queries are presented in Table 3.8-1, along with a description of the habitat requirements for each species, its protection status, and a brief discussion of its likelihood to occur on the Project site. Figures 3.8-1 and 3.8-2 depict only the locations of the occurrences of listed special-status species from the CNDDB query (therefore, the information included in Table 3.8-1 is not identical to the information depicted in Figures 3.8-1 and 3.8-2). Species with distributions outside the Project site vicinity and/or for which suitable habitat is clearly absent (as determined by desktop aerial photo review) (e.g., marbled murrelet) are not included in Table 3.8-1. Only one special-status wildlife species, hoary bat (*Lasiurus cinereus*), has any potential to occur on the Project site. Many other special-status species occur or have the potential to occur in the adjacent Refuge and are noted as such in Table 3.8-1.

For the purposes of this analysis, special-status species include the following:

- Species that are listed, proposed for listing, or candidates for possible future listing as threatened or endangered under the ESA of 1973, as amended.
- Species that are listed or proposed for listing as threatened or endangered under the CESA of 1984, as amended.
- Species that are designated as Fully Protected under Sections 3511 (birds), 4700 (mammals), and 5050 (reptiles and amphibians) of the California Fish and Game Code.
- Species that are designated by CDFW as California SSC.
- Species that meet the definitions of rare or endangered under CEQA (Section 15380).

[6] California Department of Fish and Wildlife. 2015. *California Natural Diversity Database*. Available: http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp. Accessed: August 21, 2015.

[7] U.S. Fish and Wildlife Service. 2015. *IPaC.* Available: <http://ecos.fws.gov/ipac/>. Accessed: August 21, 2015.

[8] California Native Plant Society. 2015. *Online Inventory of Rare and Endangered Plants*. Available: <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>. Accessed: August 21, 2015.

Table 3.8-1. Special-Status Plant and Wildlife Species Known to Occur or Having Potential to Occur in the Project Vicinity

Scientific and Common Name	Fed/State/Other	Geographic Distribution	Habitat Requirements	Likelihood of Occurrence
Plants				
C*entromadia parryi* ssp. congdonii Congdon's tarplant	–/-/1B.1	East San Francisco Bay Area, Salinas Valley, Los Osos Valley.	Occurs in valley and foothill grasslands (alkaline). Blooms from May to October/November. Elevation ranges from 1 to 230 meters.	**None:** Documented within 2 miles of the Project site but not expected to occur because of a lack of suitable valley and foothill grassland habitat.
Cirsium praeteriens Lost thistle	-/-/1A	Unknown.	Perennial herb that is native to California. Elevation ranges from 0 to 100 meters.	**None:** Documented within 2 miles of the Project site but not expected to occur because the only sources of information for this site are 1897 and 1901 collections by Congdon. Presumed extinct.
Chloropyron maritimum ssp. *palustre* Point Reyes bird's-beak	-/-/1B,2	Coastal Northern California from Humboldt to Santa Clara Counties; Oregon.	Coastal salt-marsh and swamp habitats. Blooms from June to October. Elevation ranges from 0 to 10 meters.	**None:** Although there are known occurrences within 2 miles of the Project site, the absence of suitable habitat at the Project site precludes the species from occurring.
Stuckenia filiformis ssp. *alpina* Slender-leaved pondweed	-/-/2B.2	Klamath Ranges, Sierra Nevada, Great Central Valley, Central Coast, and San Francisco Bay Area.	Assorted shallow freshwater marshes and swamps. Blooms from May to July. Elevation ranges from 300 to 2,150 meters.	**None:** No suitable habitat occurs within or adjacent to the Project site. However, there are known occurrences within 2 miles of the Project site.

Scientific and Common Name	Fed/State/Other	Geographic Distribution	Habitat Requirements	Likelihood of Occurrence
Fish				
Spirinchus thaleichthys Longfin smelt	–FC/ST/SSC-	Upstream from Rio Vista (on the Sacramento River in the Delta), including the Cache Slough region and Medford Island (on the San Joaquin River in the Delta), through Suisun Bay and Suisun Marsh, San Pablo Bay, San Francisco Bay (main), South San Francisco Bay, the Gulf of the Farallones, Humboldt Bay, Eel River estuary, and local coastal areas.	Occurs in waters below 22 degrees Celsius; can tolerate a large range of salinities. Spends adult life in bays, estuaries, and nearshore coastal areas; migrates into freshwater rivers to spawn. Found mid-water and near the bottom; migrates up and down the water column for prey (Moyle 2002).	**None:** No aquatic habitat occurs on the Project site.
Amphibians				
Ambystoma californiense California tiger salamander	FT/ST/CSC	Central Valley, including Sierra Nevada foothills, up to approximately 1,000 feet above mean sea level and coastal region from Sonoma County south to Santa Barbara County.	Valley and foothill grasslands and adjacent oak woodlands; shelters in rodent burrows, and breeds in seasonal wetlands such as vernal pools.	**None:** No seasonal wetlands or valley and foothill grasslands are present on or adjacent to the Project site.
Rana draytonii California red-legged frog	FT/-/SSC	Found along the coast and coastal mountain ranges of California from Mendocino County to San Diego County and in the Sierra Nevada from Butte County to Stanislaus County.	Permanent and semi-permanent aquatic habitats, such as creeks and coldwater ponds with emergent and submergent vegetation; may aestivate in rodent burrows or cracks during dry periods.	**None:** No suitable aquatic habitat on or adjacent to the Project site.

Scientific and Common Name	Fed/State/Other	Geographic Distribution	Habitat Requirements	Likelihood of Occurrence
Reptiles				
Thamnophis sirtalis tetrataenia San Francisco garter snake	FE/SE/FP	Occurs in the San Francisco Bay Area from Half Moon Bay to the west side of the Santa Cruz Mountains. Populations found west of Bayshore Expressway, surrounding Crystal Springs and San Andreas Reservoirs, and at San Francisco International Airport, Laguna Salada, Pescadero Marsh, Ano Nuevo State Reserve, and Cascade Ranch.	Uses a variety of habitats, preferring grasslands or wetlands near ponds, marshes, and sloughs. May overwinter in upland areas away from water.	**None:** The CNDDB record is a non-specified occurrence from 1922 and identified as "unreliable" by USFWS. The Project site is not located within or near one of the known populations and does not contain suitable habitat for this species.
Birds				
Circus cyaneus Northern harrier	-/-/CSC	Breeds from sea level to 5,700 feet in elevation in the Central Valley and Sierra Nevada and up to 3,600 feet in northeastern California. Permanent resident of the northeastern plateau and coastal areas; less common resident of the Central Valley.	Grasslands and open habitats; typically nests on the ground in dense vegetation.	**None:** No suitable nesting habitat on the Project site. Known to occur on the nearby Refuge.
Laterallus jamaicensis coturniculus California black rail	-/ST/FP	Permanent resident in the San Francisco Bay and eastward through the Delta into Sacramento and San Joaquin Counties; small populations in Marin, Santa Cruz, San Luis Obispo, Orange, Riverside, and Imperial Counties.	Occurs most commonly in tidal emergent wetlands dominated by pickleweed or in brackish marshes that support bulrushes in association with pickleweed. In fresh water, usually found in bulrushes, cattails, and saltgrass. Usually found in immediate vicinity of tidal sloughs.	**None:** No suitable habitat on the Project site. May occur in nearby salt marshes on the Refuge.

Scientific and Common Name	Fed/State/Other	Geographic Distribution	Habitat Requirements	Likelihood of Occurrence
Rallus obsoletus obsoletus California Ridgway's (= clapper) rail	FE/SE/FP	Found along the Pacific Coast in Monterey and San Luis Obispo Counties.	Saltwater and brackish marshes traversed by tidal sloughs in the vicinity of the Bay. Associated with abundant growths of pickleweed but feeds away from cover on invertebrates from mud-bottom sloughs.	**None:** No suitable habitat on the Project site. May occur in nearby salt marshes on the Refuge.
Charadrius alexandrinus nivosus Western snowy plover	FT/-/SSC	Population defined as those birds that nest adjacent to or near tidal waters, including all nests along the mainland coast, peninsulas, offshore islands, and adjacent bays and estuaries. Twenty breeding sites are known in California, from Del Norte to San Diego County.	Coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries.	**None:** No suitable nesting habitat on the Project site. Known to occur on the nearby managed pond/salt panne habitat on the Refuge.
Sternula antillarum browni California least tern	FE/SE/FP	Found along the Pacific Coast of California from San Francisco to Baja California	Nests are situated on barren to sparsely vegetated places near water, normally on sandy or gravelly substrates. In the Bay Area, breeding typically takes place on abandoned salt flats.	**None:** No suitable habitat on the Project site. May forage in nearby managed ponds on the Refuge.
Athene cunicularia Burrowing owl	–/–/SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along South Coast.	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along South Coast. Level, open, dry, heavily grazed or low-stature grassland or desert vegetation with available burrows.	**None:** No open, dry habitat with available burrows occurs within or adjacent to the Project site.

Scientific and Common Name	Fed/State/Other	Geographic Distribution	Habitat Requirements	Likelihood of Occurrence
Geothlypis trichas sinuosa San Francisco (= saltmarsh) common yellowthroat	-/-/SSC	Found only in the San Francisco Bay Area in Marin, Napa, Sonoma, Solano, San Francisco, San Mateo, Santa Clara, and Alameda Counties.	Freshwater marshes in summer and salt or brackish marshes in fall and winter; requires tall grasses, tules, and willow thickets for nesting and cover.	**None:** No suitable habitat on the Project site. May occur in nearby salt marshes on the Refuge.
Melospiza melodia pusillula Alameda song sparrow	-/-/SSC	Found only in marshes along the southern portion of the San Francisco Bay.	Tidal marshes around the perimeter of San Francisco Bay.	**None:** No suitable habitat on the Project site. May occur in nearby salt marshes on the Refuge.
Mammals				
Lasiurus cinereus Hoary bat	-/-/SSC	Occurs throughout California from sea level to 13,200 feet.	Found primarily in forested habitats. Also found in riparian areas and in park and garden settings in urban areas. Day roosts in foliage of trees.	**Low:** Potentially suitable tree roosts on the Project site. Documented within 2 miles of the Project site in 1894. Seven additional occurrences were documented in San Mateo County in 1991 (outside of the 2-mile boundary).
Reithrodontomys raviventris Salt-marsh harvest mouse	FE/SE/FP	San Francisco Bay estuary and Suisun Marsh.	Occurs only in the saline emergent wetlands of the Bay and its tributaries. Pickleweed is primary habitat. Does not burrow; builds loosely organized nests. Requires higher areas for flood escape.	**None:** No suitable habitat on the Project site. May occur in nearby salt marshes on the Refuge.
Sorex vagrans halicoetes Salt-marsh wandering shrew	-/-/SSC,	Southern arm of the Bay in San Mateo, Santa Clara, Alameda, and Contra Costa Counties.	Upper half of the middle marsh zone where inundated by higher high tides that contain abundant vegetation cover, surface moisture, and organic detritus, with abundant amphipods and other crustaceans.	**None:** No suitable habitat on the Project site. May occur in nearby salt marshes on the Refuge.
Taxidea taxus American badger	-/-/SSC	Permanent resident found throughout most of the state, except in the northern North Coast area.	Dry, open grasslands, fields, and pastures from high alpine meadows to sea level.	**None:** No open grasslands, fields, or pastures occur at the Project site.

Scientific and Common Name	Fed/State/Other	Geographic Distribution	Habitat Requirements	Likelihood of Occurrence

Source:

California Department of Fish and Wildlife. 2015. *California Natural Diversity Database.*

California Native Plant Society. 2015. *Online Inventory of Rare and Endangered Plants*.

Nilsen, Tokatlian, Scullen, Burns. 2013. *Western Snowy Plover Monitoring in San Francisco Bay*. Milpitas, CA.

U.S. Fish and Wildlife Service. 2006. *San Francisco Garter Snake 5-Year Review: Summary and Evaluation*. Sacramento, California.

U.S. Fish and Wildlife Service. 2013. *Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California*. Sacramento, California.

Notes:

Federal

FE = Federally listed as Endangered

FT = Federally listed as Threatened

FC = Federally candidate for listing

State

SE = State listed as Endangered

ST = State listed as Threatened

FP = State listed as Fully Protected

Other

SSC = California Species of Special Concern

California Rare Plant Rank

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 - a watch list

CNPS Threat Code Extension

.1 = Species seriously endangered in California

.2 = Species fairly endangered in California

.3 = Species not very endangered in California

– = no status

Scientific and Common Name	Fed/State/Other	Geographic Distribution	Habitat Requirements	Likelihood of Occurrence

Likelihood of Occurrence Evaluations

A rating of "low" indicates that the species was not found during biological surveys conducted to date on the site and is not expected given its known regional distribution or the quality of habitats on the site.

A rating of "none" indicates that the species would not be expected to occur on the Project site because the site is not within the known range of the species or does not support suitable habitat.

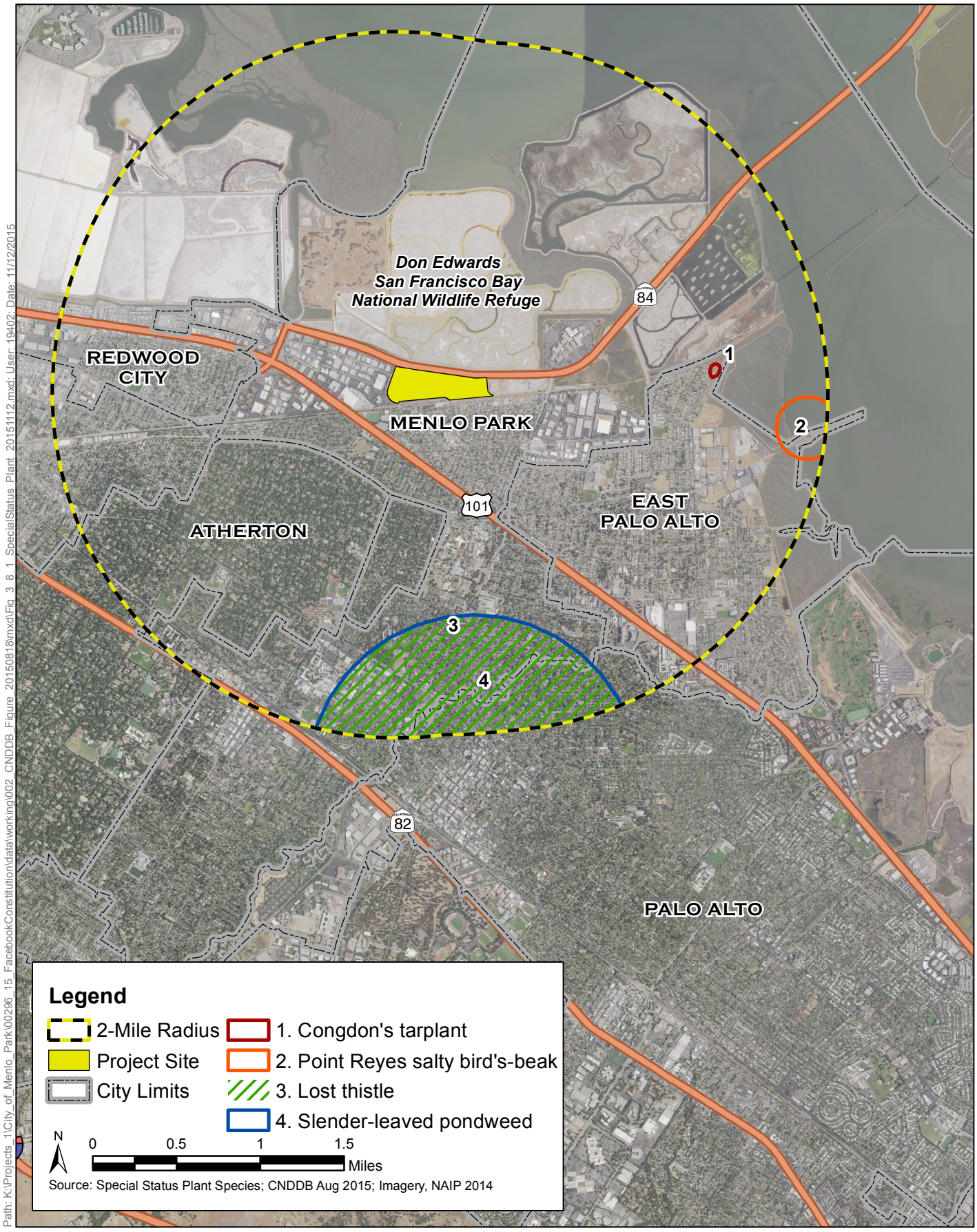
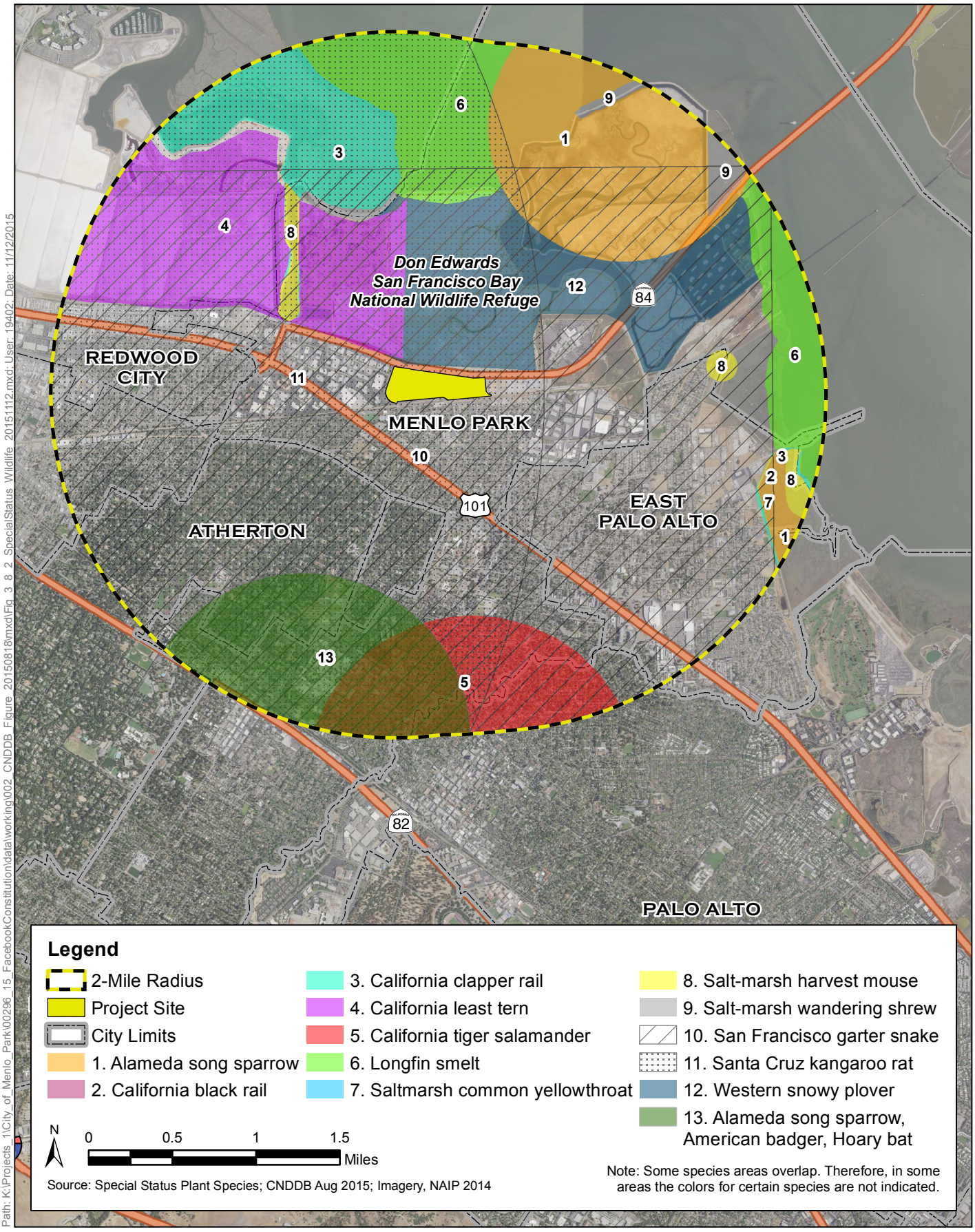


Figure 3.8-1
Special Status Plant Species
Facebook Campus Expansion Project Draft EIR



Path: K:\Projects_1\City_of_Menlo_Park\00296_15_FacebookConstitution\data\working\002_CNDDB_Figure_20150818\mxd\Fig_3_8_2_SpecialStatus_Wildlife_20151112.mxd; User: 19402; Date: 11/12/2015

Figure 3.8-2
Special Status Wildlife Species
Facebook Campus Expansion Project Draft EIR

Environmental Impacts

This section identifies potential impacts on biological resources from implementation of the Project. It describes the methods used to determine the impacts of the Project and lists the thresholds used to measure whether an impact would be significant. Impacts are determined to be no impact (NI), less than significant (LTS), less than significant with mitigation (LTS/M), or significant and unavoidable (SU). Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, as needed.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact 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 CDFW or USFWS.
- 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 CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (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 identification of potential impacts on biological resources was based on an analysis of special-status species with the potential to occur in the Project vicinity (i.e., review of CNDDB,[9] CNPS,[10] and USFWS[11] databases) and their habitat requirements; existing habitat conditions on the Project site, as observed during the August 17, 2015, site visit; comments received on the NOP; and a review of the Project description to identify any actions that could result in significant impacts on biological resources, as defined by the above thresholds of significance. As required by the City's Municipal Code, tree surveys were conducted by an ISA certified arborist,[12] and a tree report and map[13] was prepared that shows the locations of all pertinent trees prior to initiation of construction activities.

[9] California Department of Fish and Wildlife. 2015. *California Natural Diversity Database*. Available: <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>. Accessed: August 21, 2015.

[10] California Native Plant Society. 2014. *Online Inventory of Rare and Endangered Plants*. Available: http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp. Accessed August 21, 2015.

[11] U.S. Fish and Wildlife Service. 2015. *IPaC.* Available: <http://ecos.fws.gov/ipac/>. Accessed: August 21, 2015.

[12] SCBA Tree Consulting. 2015. *Tree Survey at 301–309 Constitution Drive.* December 21, 2015.

[13] Gehry Partners, LLP. 2015. *Proposed Future Tree Information Site Plan*. October 9, 2015.

Impacts Not Evaluated In Detail

Loss of Riparian Habitat, Sensitive Natural Communities, or Wetlands. The August 17, 2015, field survey found that no riparian habitat, sensitive natural communities, or wetlands are present on the Project site. The Project site is located approximately 250 feet south of the Refuge, but there is no habitat connectivity between the Project site and the Refuge because of the presence of Bayfront Expressway. The proposed multi-use bicycle/pedestrian bridge over Bayfront Expressway would touch down on the north side of Bayfront Expressway and provide access to the existing Bay Trail. The bridge touchdown area would be located within the California Department of Transportation (Caltrans) easement, immediately adjacent to the north side of the Bay Trail. Although the bridge touchdown area would not extend into the Refuge, a portion of the aerial walkway could cantilever beyond the Caltrans easement. Regardless, the aerial structure would not result in the loss of riparian habitat or sensitive natural communities. There is a large concrete drainage ditch on the south side of Bayfront Expressway adjacent to, but outside of, the Project site's boundary. The concrete drainage ditch would not be affected by the Project. Therefore, implementation of the Project would result in ***no impact*** on riparian habitat, sensitive natural communities, or wetlands; this impact is not discussed further.

Conflicts with Adopted Habitat Conservation Plans. 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 entire Project site is developed and zoned M-2 (General Industrial) and M-2-X (General Industrial, Conditional Development). As described above, the Project includes a bicycle/pedestrian trail that would touch down on the north side of Bayfront Expressway, approximately 100 feet from the Refuge. USFWS is actively pursuing expansion of the Refuge and protection of the habitats and associated plant and wildlife species contained therein. USFWS is also closely involved with the South Bay Salt Pond Restoration Project, which has active restoration sites near the Project site. Implementation of the Project would not involve any construction outside the currently developed/disturbed areas; therefore, the Project would not interfere with management and/or expansion of the Refuge or the restoration project (this is discussed in more detail in the *Cumulative Impacts* section, below). The Project would have ***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 discussed further.

Impacts and Mitigation Measures

Impact BIO-1: Direct Impacts on Special-Status Species. The Project could directly affect species that have been identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations. (LTS/M)

Hoary bats are the only special-status species with any potential to occur on the Project site. Although they have a low likelihood of occurrence, hoary bats could roost in the foliage of trees at the Project site. With implementation of the Project, seven of the existing 10 buildings on the Project site would be demolished,[14] and most of the vegetation, including all 770 trees at the Project site (274 of which qualify as heritage trees),[15] would be removed. However, as part of the Project, approximately 1,600 trees would be planted as landscaping on the Project site; of that number, a minimum of 423 would be planted

[14] Buildings 307–309 (which are considered two buildings) would be demolished under a separate project, and therefore, the demolition of these buildings is not considered part of the Project. Building 23 would remain at the Project site.

[15] SCBA Tree Consulting. 2015. *Tree Survey at 301–309 Constitution Drive.* December 21, 2015.

to offset the removal of heritage trees.[16] This would result in an overall net gain in roosting habitat for potential bat species. The removal of trees that contain active bat roosts, particularly during the nesting season (typically April through August), could result in the loss of individual bats, bat colonies, or their habitat. Although adult hoary bats may be able to escape during tree removal, if tree and shrub removal is to occur during the maternity season (May 1 through October 1), young bats that cannot yet fly are likely to be killed or injured during vegetation removal. This would result in take of these species. The loss of individual bats and disruption of maternity roosting bats, resulting in the abandonment of young or the loss of young through vegetation removal, would be a ***potentially significant*** impact.

MITIGATION MEASURE. Implementation of Mitigation Measure BIO-1.1 would reduce potential roosting and breeding bat impacts from the Project to a ***less-than-significant*** level.

BIO-1.1: Identify and Protect Roosting and Breeding Bats on the Project Site and Provide Alternative Roosting Habitat. The Project Sponsor shall implement the following measures to protect any roosting and/or breeding bats found in a tree that is to be removed during Project implementation.

Prior to tree removal or demolition activities, the Project Sponsor shall retain a qualified wildlife biologist with demonstrated bat survey experience to conduct a focused survey for bats and potential roosting sites within trees that are to be removed during the period when bats are most active (May 1 through October 1). The surveys can be conducted by visual identification. If bats are observed on the Project site in areas where they could be affected by the Project, they will be identified to species level using a bat echolocation detector (e.g., "Anabat" unit). If no roosting sites or bats are found, the biologist shall submit a letter report confirming absence to CDFW, and no further mitigation will be required.

If roosting bats are found during the above survey and roosting areas will be affected, avoidance and minimization measures shall be implemented. Appropriate measures will be determined in coordination with CDFW and may include the following:

- Tree removal shall be avoided between April 15 and September 15 (the maternity period) to avoid impacts on pregnant females and active maternity roosts (whether colonial or solitary).
- All tree removal will be conducted between September 15 and October 30, which corresponds to the time period when bats have not yet entered torpor or are not caring for non-flying young.
- Trees will be removed in pieces rather than felling the entire tree.
- If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until September 15 or until a qualified biologist has determined the roost is no longer active.
- If avoidance of non-maternity roost trees is not possible and tree removal or trimming must occur between September 15 and October 30, a qualified biologists will monitor tree trimming/removal. Prior to removal/trimming, each tree will be gently shaken; several minutes should pass before felling trees or trimming limbs to allow bats time to arouse and leave the tree. The biologists should search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW.

[16] Gehry Partners, LLP. 2016. *Proposed Future Tree Information Site Plan*. March 3, 2016.

- Compensatory mitigation for the loss of roosting habitat will also be determined through consultation with CDFW and may include the construction and installation of suitable replacement habitat (e.g., bat houses, cottonwood trees) onsite.
- The performance standard for any replacement roosting habitat will be to demonstrate occupancy by roosting bats within 5 years of installation or construction. Occupancy shall be determined by whichever monitoring technique (e.g., roost emergence surveys, acoustic surveys) the qualified bat biologist deems most likely to determine bat presence.

The Project Sponsor will be responsible for ensuring that CDFW requirements are implemented. Multiple survey visits and survey methods may be required at a single site to determine presence or absence of roosting bats, depending on season and roost type.

Impact BIO-2: Indirect Impacts on Special-Status Species. The Project could result in increased predation of special-status bird and mammal species that inhabit nearby saltwater and brackish water marshes in the Don Edwards National Wildlife Refuge. (LTS/M)

As discussed under Impact BIO-1, seven existing buildings and most of the vegetation on the Project site would be removed. As part of the Project, three new buildings would be constructed, and approximately 1,600 trees would be planted as landscaping on the Project site. Additionally, the Project would include a 2-acre publicly accessible park in the center of the site and a bicycle/pedestrian bridge over Bayfront Expressway that would allow for wildlife movement between Belle Haven, the Project site, Bedwell Bayfront Park, and the Refuge. All of these Project components could facilitate increased predation of special-status species in the adjacent Refuge.

Mammalian predators could use the bicycle/pedestrian bridge to cross Bayfront Expressway and access the Refuge; however, predators can already cross Bayfront Expressway at any intersection without median barriers, such as at the intersections with Chilco Street, Building 20 (exit/entrance), and Willow Road (which also has an underground protected tunnel). Migration across Bayfront Expressway is most conceivable at night when traffic is reduced and mammalian predators are less likely to be injured or killed by cars. The existing protected tunnel under the Bayfront Expressway/Willow Road intersection, which connects the Buildings 10–19 Campus and the Building 20 Campus, is also a safe means of passage at any time of day. Because most wildlife species prefer concealed migration pathways, the existing tunnel is more suitable for wildlife movement than the proposed bicycle/pedestrian bridge would be. Therefore, because the existing conditions of the Project vicinity support wildlife movement, the bicycle/pedestrian bridge is not expected to substantially increase predator migration across Bayfront Expressway. Increased predation on special-status species in the Refuge from construction of the bicycle/pedestrian bridge would be a ***less-than-significant*** impact.

The new buildings, trees, and the bicycle/pedestrian bridge could provide perch sites from which raptors and other avian predators could prey on special-status species (e.g., western snowy plover, California Ridgway's rail, salt-marsh harvest mouse) in the Refuge. The existing buildings at the Project site are one or two stories in height, whereas the new buildings would be approximately 75 feet in height and would have trees planted on the roofs. Taller buildings with vegetation would provide an improved vantage point for avian predators near the Refuge. Additionally, the bicycle/pedestrian bridge would span Bayfront Expressway at a height of approximately 35 feet, providing a new elevated structure, with an aerial walkway that could cantilever beyond the Caltrans easement. The San Francisco Bay Bird Observatory monitors western snowy plovers in the Refuge annually and has consistently documented the presence of common raven (*Corvus corax*), American crows (*Corvus brachyrhynchos*),

northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo jamaicensis*), and California gull (*Larus californicus*), the latter of which presents the greatest risk to nesting snowy plovers. These species could occupy the Project site, particularly the common raven, American crow, and California gull, which are attracted to urbanized areas that contain trash. Increased predation of special-status species due to avian predators perching on new structures and vegetation at the Project site would be a ***potentially significant*** impact.

MITIGATION MEASURE. Implementation of Mitigation Measure BIO-2.1 would reduce potential impacts from predation on special-status species to a ***less-than-significant*** level.

BIO-2.1: Install Bird Perching Deterrents on All New Buildings and Other Elevated Structures, Including the Bicycle/Pedestrian Bridge. The Project Sponsor shall implement the following measures to protect special-status species from increased predation on the Project site:

- For all new buildings constructed on the Project site, as well as the bicycle/pedestrian bridge and northern bridge approaches, the Project Sponsor shall install bird deterrents along suitable perching sites to deter avian predators of special-status species that inhabit the adjacent salt marshes. Such deterrents may include one or more of the following: bird spikes, bird netting, an electric shock track, sound deterrents, or perching deterrents approved by CDFW and/or USFWS.
- Trees that are used for replacement landscaping, especially those planted on rooftops, shall consist of species that generally do not exceed 30 feet in height to limit the visibility of adjacent salt marshes to the north. These trees may include native or non-invasive nonnative ornamental species. Species with broad canopies are preferred because tress with tall, narrow canopies (e.g., palms or conifers) generally provide better hunting perches for raptors. Additionally, trees that are planted on the rooftops of the new buildings shall be located away from the edge of the roof and planted with a reduced line of sight to the Bay.

Impact BIO-3: Impacts on Native Wildlife Nursery Sites. The removal of buildings, trees, shrubs, or woody vegetation and the installation of new buildings and lighting could affect native migratory birds. (LTS/M)

Existing shrubs and trees on the Project site provide nesting habitat for a variety of native birds; however, this habitat is of low quality because of the developed nature of the site and surrounding area. Seven of the existing buildings on the Project site would be demolished, and existing landscaping would be removed; the Project site would then be developed with new buildings and landscaping. As discussed under Impact BIO-1, all 770 trees on the Project site would be removed; approximately 1,600 trees would be planted as part of Project landscaping. As such, increased avian nesting habitat would be provided on the Project site following Project implementation.

If the 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, and/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 litters or the loss of active nests through vegetation or structure removal would be a ***potentially significant*** impact.

Although the foundation and vertical supports of the proposed bicycle/pedestrian bridge touchdown would be located within the Caltrans easement, a portion of the aerial walkway could cantilever beyond the Caltrans easement. In addition, new lighting associated with the Project (e.g., on the bicycle/pedestrian bridge, new buildings) could misdirect or confuse birds or other special-status wildlife species while using adjacent areas, resulting in a disruption of natural behavioral patterns and possible injury or death from exhaustion or colliding with buildings. The potential for these types of impacts could be heightened because of the Project site's proximity to the Refuge. Impacts on birds and other special-status wildlife species from Project buildings and increased lighting levels would be ***potentially significant***.

MITIGATION MEASURE. Implementation of Mitigation Measures BIO-2.1 (above), BIO-3.1, and BIO-3.2 would reduce potential nesting migratory bird impacts from the Project to a ***less-than-significant*** level.

BIO-3.1: Conduct Pre-construction Surveys for Nesting Migratory Birds. The Project Sponsor shall implement the following measures to reduce impacts on nesting migratory birds:

- To facilitate compliance with state and federal law (California Fish and Game Code and the MBTA) and prevent impacts on nesting birds, the Project Sponsor shall avoid construction during the nesting season (February 1 through September 14) or conduct pre-construction surveys, as described below.
- If it is not feasible to avoid the nesting season, the Project Sponsor shall hire a qualified wildlife biologist with demonstrated experience to conduct a survey for nesting birds, including raptors, no earlier than 3 days prior to the commencement of ground-disturbing activities and vegetation removal (including clearing, grubbing, and staging). The area surveyed shall include all construction areas within the Project site as well as areas within 250 feet outside the boundaries of the areas to be cleared or as otherwise determined by the biologist.
- If construction activities related to the multi-use bicycle/pedestrian bridge and occurring on the northern side of Bayfront Expressway are initiated during the nesting bird season, within 3 days prior to the start of construction, a survey shall be conducted by a qualified biologist to determine whether western snowy plovers are nesting within 600 feet of the proposed construction area. Surveys shall be conducted on 2-week intervals, between February 1 and through May 30, or longer, if necessary, as determined by the biologist, based on the behavior and habitat. If an active nest is identified, a buffer of 600 feet shall be established between the construction area and the nest, and the nest shall be periodically monitored by a qualified biologist to determine when it is no longer active (at which point the buffer will no longer be needed). If there is a visual barrier, such as a levee or dense vegetation, between the construction area and the nest such that the plover will not be able to see construction activity from the nest, then the Project Sponsor may coordinate with USFWS to determine whether a reduced buffer would be adequate to allow work to occur without disturbing nesting plovers.
- A nest survey shall be required prior to implementation of Phase 1 and Phase 2 of the Project and when construction work stops at a portion of the site where suitable nesting habitat remains for more than 15 days. Additionally, at least one nest survey shall be conducted at the beginning of each year of Project implementation between February and May. As discussed in Chapter 2, *Project Description*, Project

implementation will occur between 2016 and 2022. The need for additional surveys shall be determined by the qualified wildlife biologist and based on the results of the initial survey.

- If the biologist finds active nests during the survey, he or she shall establish species-specific no-disturbance buffer zones for each nest with use of high-visibility fencing, flagging, or pin flags. No construction activities shall be allowed within the buffer zones. The size of the buffer shall be based on the species sensitivity to disturbance and planned work activities in the vicinity. The buffer shall remain in effect until the nest is no longer active.
- If structure demolition activities cannot occur outside of the nesting season, the Project Sponsor or its contractor shall remove inactive nests from the structure to be demolished and install nest exclusion measures (i.e., fine mesh netting, panels, or metal projectors) outside of the nesting season. All exclusionary devices shall be monitored and maintained throughout the breeding season to ensure that they are successful in preventing the birds from accessing cavities or nest sites. No more than 3 days prior to building demolition activities, a qualified biologist shall conduct a pre-construction survey of all potential nesting habitat on the structure to be demolished and the surrounding areas for the presence of active nests. If active nests are found on the building or in the affected area, then demolition activities shall not proceed until the biologist verifies that all nests on the building are inactive.
- After all surveys and/or nest deterrence activities are completed, the biologist shall complete a memorandum detailing the survey effort and results and submit the memorandum to the City within 7 days of survey completion.

BIO-3.2: *Implement Bird-Safe Design Standards into Project Buildings and Lighting Design*. The Project Sponsor or its contractor shall implement the following measures to minimize hazards to birds:

- Reduce large areas of transparent or reflective glass.
- Locate water features, trees, and bird habitat away from building exteriors to reduce reflection.
- Reduce or eliminate the visibility of landscaped areas behind glass.
- Turn non-emergency lighting off at night, especially during bird migration season (February–May and August–November).
- Include window coverings that adequately block light transmission from rooms where interior lighting is used at night and install motion sensors or controls to extinguish lights in unoccupied spaces.
- Design and/or install lighting fixtures that minimize light pollution, including light trespass, over-illumination, glare, light clutter, and skyglow, while using bird-friendly colors for lighting when possible. San Francisco's *Standards for Bird-safe Buildings* document[17] provides a good overview of building design and lighting guidelines to minimize bird/building collisions.

[17] City and County of San Francisco. 2011. *Standards for Bird-Safe Buildings*. San Francisco Planning Department. July 14. Available: <http://www.sf-planning.org/ftp/files/publications_reports/bird_safe_bldgs/Standards%20for%20Bird%20Safe%20Buildings%20-%2011-30-11.pdf>.

Impact BIO-4: Conflicts with Any Local Policies or Ordinances that Protect Biological Resources. The Project would not result in conflicts with Chapter 13.24 of the Municipal Code (Heritage Tree Ordinance). (LTS)

There are currently 770 trees on the Project site, including 274 trees that qualify as heritage trees under the City's Heritage Tree Ordinance.[18,19] The 770 trees consist almost entirely of nonnative ornamental species, such as blackwood acacia (*Acacia melanoxylon*), Japanese maple (*Acer palmatum*), deodar cedar (*Cedrus deodara*), silver dollar gum (*Eucalyptus polyanthemos*), honey locust (*Gleditsia triacanthos inermis*), Lombardy poplar (*Populus nigra "*Italica"), plum (*Prunus cerasifera*), and holly oak (*Quercus ilex*). Two native (but planted and thus also ornamental) tree species on the Project site include coast live oak (*Quercus agrifolia*) and white alder (*Alnus rhombifolia*). 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).

This analysis assumes that all of the heritage trees would be removed during clearing of the Project site for redevelopment. Removal of heritage trees without first obtaining an appropriate permit from the Director of Public Works or his/her designee and payment of a fee is prohibited. As a part of obtaining a tree removal permit, the Project Sponsor must be in compliance with the Heritage Tree Ordinance, as described in more detail below. Because compliance with the tree ordinance is mandatory, this impact would be considered ***less than significant***.

The Project would be required to adhere to Chapter 13.24 of the City's Municipal Code, as follows.

- For those heritage trees to be removed, the Project Sponsor shall submit a site plan with the Heritage Tree Removal Application, even if it has submitted a site plan to the City for a planning or building permit. The site plan facilitates the review by the City Arborist. For removal of two or more trees, the Project Sponsor shall be required to submit a planting plan, indicating the species, size, and location of the proposed replacement trees on a site plan. Heritage Tree Permits related to construction shall also be charged for City-retained arborist expenses.
- The City determines the heritage tree replacement ratio. In general, all commercial applicants who are granted approval to remove a heritage tree are required to replace the lost trees at a ratio of 2:1. However, the City may exercise discretion regarding the size and number of trees an applicant may be required to plant. Replacement trees must be planted within 30 days after the heritage tree is removed, must be planted at least 10 feet away from any structures, must not be planted under overhead utility wires, and must not be planted over underground utilities.[20] The proposed approach for this Project is for heritage trees that are in good health (as determined by a certified arborist) to be replaced at a ratio of 2:1 and heritage trees with fair or poor health, or dead heritage trees, to be replaced at a ratio of 1:1. The Project Sponsor is proposing to plant a minimum of 423 trees to replace the 274 heritage trees that would be removed following Project implementation, which meets the proposed heritage tree replacement ratio for the Project.[21,22]

[18] SCBA Tree Consulting. 2015. *Tree Survey at 301–309 Constitution Drive.* December 21, 2015.
[19] City of Menlo Park. 2010. *Menlo Park Municipal Code*. Section 16.46.030(7). December 14, 2010.
[20] City of Menlo Park, Community Development. n.d. *Heritage Tree Replacement Procedures*." Available: <http://www.menlopark.org/departments/pln/htree/Htree_Replacement_Pro.pdf>. Accessed: September 9, 2013.
[21] Gehry Partners, LLP. 2015. *Proposed Future Tree Information Site Plan*. October 9, 2015.
[22] Gehry Partners, LLP. 2015. *Tree Disposition Plan*. October 2015.

Cumulative Impacts

Unless otherwise identified below, the geographic context for the analysis of cumulative biological impacts includes the nine counties within the Bay Area. The analysis accounts for all anticipated cumulative growth within this geographic area, as represented by full implementation of the general plans of the nine Bay Area cities and counties, including the projects shown in Table 3.0-1 of Chapter 3, *Environmental Impact Analysis*.

Impact C-BIO-1: Cumulative Impacts on Roosting Bats. Removal of buildings, trees, shrubs, or other woody vegetation associated with construction of the Project and other development would result in impacts on roosting bats. (LTS)

As described under Impact BIO-1, activities that result in the removal of existing buildings, trees, shrubs, or other woody vegetation could adversely affect roosting bats, either by causing a loss of bats or the abandonment of an active roosting area. The Project site's existing habitat quality is poor because of its urban, developed nature, reducing its suitability for roosting bats. Although the likelihood of occurrence is low, the bats could occupy the foliage of existing trees on the Project site. With future development in the Bay Area, it is reasonable to expect that there would be a loss of buildings, trees, and other woody vegetation that provide possible roosting habitat. Specifically, roosting bats could be present in Buildings 307–309 (6), which are currently vacant and slated for demolition as part of a separate project, and in Building 23 (5), which is being renovated as a separate project. In addition, roosting bats could be located in trees along Chilco Street. It is currently anticipated that approximately 116 trees would be removed with implementation of the Chilco Street Improvements Project (14). Disturbance to these habitats, in combination with the potential loss of similar habitat in the Bay Area, could result in a potentially significant cumulative impact.

As discussed under Impact BIO-1, all of the 700 trees at the Project site would be removed as part of the Project. Implementation of other development projects in the area would also result in the removal of trees. The removal of trees that contain active bat roosts, particularly during the nesting season (typically April through August), could result in the loss of individual bats, bat colonies, or their habitat. Mitigation Measure BIO-1.1 would reduce the Project's contribution to this potentially significant cumulative impact to less than cumulatively considerable because breeding roosting bats on the Project site would be identified and protected. In addition, approximately 1,600 trees would be planted as part of landscaping at the Project site, fully replacing previously available roosts on the Project site after Project implementation and offsetting the impacts of potential tree removal in surrounding areas over time. The Project's cumulative impact would be ***less than significant.***

Impact C-BIO-2: Cumulative Indirect Impact on Special-Status Species. The Project and other development could result in increased predation of special-status birds and mammal species that inhabit nearby saltwater and brackish water marshes in the Don Edwards National Wildlife Refuge. (LTS)

Development activities in the Bay Area that result in taller structures and a net increase in trees could provide new or additional perch or nest sites for raptors and other avian predators of special-status species. Cumulative development near salt-marsh habitat in the Bay could result in potentially significant impacts on California Ridgway rail, western snowy plover, salt-marsh harvest mouse, or other special-status bird or mammal species as a result of increased predation by raptors or other predatory birds.

The Project site is located adjacent to the Refuge and provides a direct line of sight to tidal salt-marsh habitat. New buildings, the bicycle/pedestrian bridge, and trees would provide vantage points from which predatory birds could prey on special-status species in the Refuge. However, the Project site is already developed and located within a dense urban setting. It also constitutes a small proportion of the total available habitat in the Bay Area. Implementation of Mitigation Measure BIO-2.1 would reduce the Project's contribution to a potentially significant cumulative impact to less than cumulatively considerable because it would require the installation of bird-perching deterrents on all new buildings and other elevated structures on the Project site. Therefore, the Project's cumulative impact would be ***less than significant***.

Impact C-BIO-3: Cumulative Impact on Native Wildlife Nursery Sites. The removal of buildings, trees, shrubs, or other woody vegetation and the installation of new buildings and lighting could affect native migratory birds. (LTS)

Activities that result in the removal of existing buildings, trees, shrubs, or other woody vegetation, as well as noise and movement from construction near the Refuge, could adversely affect nesting birds, either by causing the loss of young birds or the abandonment of an active nest. The existing developed condition of the Project site provides low-quality habitat for nesting birds, but the Refuge is known to support nesting western snowy plovers. However, with future development in the Bay Area, it is reasonable to expect there would be a loss of buildings, trees, and other woody vegetation that provide nesting habitat and an increase in human use adjacent to the Bay as the Bay Area become more populated. In particular, the Chilco Street Improvements Project (14), which is directly adjacent to the Project site, would result in the removal of up to 116 trees, 79 of which are heritage in size.

Disturbance to these habitats, in combination with the potential loss of similar habitat on the Project site, would result in a potentially significant cumulative impact. Native bird species are protected by both state (California Fish and Game Code Sections 3503 and 3513) and federal (MBTA of 1918) laws, and it is assumed that all development would comply with these regulations, reducing the cumulative impact to less than significant. As discussed under Impact BIO-1, all of the 770 trees at the Project site would be removed and approximately 1,600 trees would be planted as landscaping as part of the Project, resulting in increased nesting habitat on the Project site following Project implementation and reducing cumulative impacts associated with habitat loss for nesting birds in the surrounding area. In addition, Mitigation Measure BIO-3.1 requires the identification and protection of nesting birds, reducing the potential impact to less than significant. Mitigation Measure BIO-3.2 requires implementation of bird-safe design standards in Project buildings and lighting designs. Therefore, the cumulative impact would be ***less than significant***.

Impact C-BIO-4: Cumulative Conflicts with Any Local Policies or Ordinances that Protect Biological Resources. The Project, in combination with other reasonably foreseeable projects, would not conflict with local policies or ordinances that protect biological resources. (LTS)

The cumulative context for an analysis of cumulative impacts regarding conflicts with local policies or ordinances that protect biological resources is the City because individual jurisdictions have differing criteria for evaluating the loss of protected resources. As described under Impact BIO-4, activities that result in the removal of heritage trees could result in conflicts with the City's Heritage Tree Ordinance.[23] With future development in the City, it is reasonable to expect there would be an additional loss of heritage trees. In particular, the Chilco Street Improvements Project (14) would result in the removal of approximately 84 heritage trees. However, compliance with the measures in Chapter 13.24 of the City's

[23] City of Menlo Park. 2010. *Menlo Park Municipal Code*. Section 16.46.030(7). December 14, 2010.

Municipal Code would be required by all future development in the City. On the Project site, compliance with Chapter 13.24 would minimize the loss of heritage trees by requiring a certain replacement ratio and tree species that are best suited to survive and thrive. Therefore, in combination with other potential projects, the cumulative impact would be ***less than significant***.