
3.10 BIOLOGICAL RESOURCES

Introduction

This section describes the biological resources that exist on the Project site. This section is based on a biological resources survey conducted on June 22, 2011 by Atkins, review of lists of special-status plants and wildlife from the California Department of Fish and Game's (CDFG) Natural Diversity Database (CNDDDB), the U.S. Fish and Wildlife Service's (USFWS) online species list, and the California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Plants. The purpose of the biological resources survey was to determine if the Project site contains any wetlands, and/or habitat that could support special-status plant or wildlife species known from the region, and to 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 pertain to the facilitation of raptor predation on special-status species occurring in the nearby salt and brackish water marshes, removal and replacement of heritage trees, and disturbance to nesting migratory birds and roosting bats.

The changes in the Conditional Development Permit (CDP) for the East Campus would not result in impacts to biological resources; therefore, Project impacts at the East Campus are not discussed further in this section.

Applicable Plans and Regulations

There are a number of State and federal regulations that relate specifically to the protection and conservation of biological resources. However, many of these concern special status species (Federal and State Endangered Species Acts) or habitats (Clean Water Act, Porter-Cologne Water Quality Control Act) that are not found within the Project area. The following regulations and ordinances are relevant to the Project area.

Federal

Federal Endangered Species Act (FESA). The federal Endangered Species Act was enacted in 1973. Under the FESA, 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]). FESA is administered by both the National Marine Fisheries Service (NMFS) and the 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. The USFWS is accountable for all other federally-listed plants and animals.

Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the project area and determine whether the proposed 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 FESA 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 to these species or their habitats would be considered significant and would require mitigation.

The Sacramento Fish and Wildlife Office maintain a list of “species of concern” that receive special attention from federal agencies during environmental review, although they are not otherwise protected under FESA. Project-related impacts to such species would also be considered significant under California Environmental Quality Act (CEQA) Guidelines Section 15380 and would require mitigation.

Projects that would result in “take” 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 FESA, 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 habitat in non-federal activities.

Migratory Bird Treaty Act of 1918. The federal Migratory Bird Treaty Act (MBTA) makes it unlawful to “take” (kill, harm, harass, etc.) any migratory bird listed in 50 CFR 10, including their nests, eggs, or products. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, and many others. Most of the birds that commonly occur within the Project area, like Brewer’s blackbird, western scrub-jay, house finch, and American crow, are protected under the MBTA.

State

California Endangered Species Act (CESA). The California Endangered Species Act was enacted in 1984. Under the CESA, the California Fish and Game Commission (CFG) has the responsibility for maintaining a list of threatened species and endangered species. CDFG also maintains lists of species of special concern which impacts would be considered significant under CEQA Guidelines Section 15380 and could require mitigation. Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the Project area and determine whether the proposed project would have a potentially significant impact on such species. In addition, CDFG encourages informal consultation on any Project which may impact a candidate species. CESA prohibits the take of California listed animals and plants in most cases, but CDFG may issue incidental take permits under special conditions.

Sections 3503, 3503.5, 3800 of the Fish and Game Code. These sections of the Fish and Game Code prohibit the “take, possession, or destruction of birds, their nests or eggs.” Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a “take.” Removal of vegetation is the most common action that can lead to a violation of these code sections.

Local

City of Menlo Park Municipal Code Chapter 13.24. The Project would be subject to the City of Menlo Park Municipal Code (Municipal Code) Chapter 13.24, which establishes regulations for the preservation of heritage trees. The Project could result in a loss of trees protected by Chapter 13.24. The Municipal Code, Chapter 13.24 establishes regulations for the preservation and removal of heritage trees, which are defined as:

- A tree or group of trees of historical significance, special character or community benefit, specifically designated by resolution of the City Council;
- An oak tree (*Quercus* sp.) which is native to California and has a trunk with a circumference of 31.4 inches (diameter of ten [10] inches) or more, measured at fifty-four (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 twelve (12) feet in height, which will be exempt from this section; and
- All trees other than oaks which have a trunk with a circumference of 47.1 inches (diameter of fifteen (15) inches) or more, measured fifty-four (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 twelve (12) feet in height, which will be exempt from this section. (Ord. 928 Section 1 (part), 2004).

As required by the City's Municipal Code, a tree survey shall be conducted by a certified arborist, and a tree report and map shall be prepared showing the locations of all pertinent trees within the Project envelope prior to initiation of construction activities. Any work performed within an area ten 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 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 and payment of a fee. In keeping with the general intent of Chapter 13.24 to preserve and maintain trees, the Project Sponsor shall retain as many of the native trees as feasible.

Applicants are required to submit a site plan with the Heritage Tree Removal Application Permit 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. Also for removals of two or more trees, applicants 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 will also be charged for City-retained arborist expenses.

City of Menlo Park General Plan. The following policy from the Land Use Element of the General Plan pertain to the Project.

Policy I-G-8: The Bay, its shoreline, San Francisquito Creek, and other wildlife habitat and ecologically fragile areas shall be maintained and preserved to the maximum extent possible. The City shall work in cooperation with other jurisdictions to implement this policy.

The following goal and policies from the Open Space and Conservation Element of the City's General Plan pertain to the Project.

Goal 7: To protect and conserve open areas rich in wildlife or of a fragile ecological nature.

Policy 6: Protect conservation and scenic areas, historic and cultural, from deterioration or destruction by vandalism, private actions or public actions.

Policy 7: Preserve and protect water, water-related areas, wildlife and plant habitat areas to maintain and enhance their open space and conservation purposes.

Existing Conditions

The Project site, which includes the East Campus and the West Campus, is located within the Palo Alto United States Geological Survey (USGS) 7.5 minute quadrangle in San Mateo County. Both the East Campus and West Campus are relatively flat and occur between 9 and 13 feet above mean sea level (msl). The East Campus and West Campus are separated by Bayfront Expressway/State Route (SR) 84, which runs in an east-west direction between the two campuses. Commercial, industrial, and residential development occurs to the south and southeast of the Project site. While the two campuses are currently developed, both sites are built on San Francisco Bay fill lands that formerly consisted of salt and brackish water marshes. Salt and brackish water marshes that border the southern portion of the Bay occur to the north and west of the East Campus are a part of the Don Edwards Bay National Wildlife Refuge (Refuge) and are associated with the South Bay Salt Pond Restoration Project.

East Campus

The East Campus is bound by the tidal mudflats and marshes of the Bay and Ravenswood Slough to the north and west, and Bayfront Expressway to the east and south. The Bay Trail runs along the southern portion of the East Campus, directly adjacent to Bayfront Expressway. The interior of the site consists of a cluster of existing multistory buildings surrounded by paved parking lots, and landscaping. Vegetation consists of ornamental lawns, shrubs, and trees. Tree species observed on the East Campus during the June 22, 2011 survey included river birch (*Betula nigra*), Brisbane box (*Tristania conferta*), thornless honey locust (*Gleditsia triacanthos*), paperbark tree (*Melaleuca quinquenervia*) and coast live oak (*Quercus agrifolia*). Small unidentified birds were observed in the courtyard during the survey, but no other wildlife species appeared to be present during the survey.

West Campus

The West Campus is bound by Bayfront Expressway to the north, Willow Road to the east, the Dumbarton Rail Corridor to the south, and the TE Connectivity site to the west. The Belle Haven neighborhood is located across the Dumbarton Rail Corridor to the south. Approximately half of the West Campus is developed and the entire site is currently unoccupied. Buildings on the western portion of the site are currently abandoned, and the landscaping associated with the development is unmaintained and overgrown with non-native annual grasses and forbs such as ripgut brome (*Bromus*

diandrus), wild oats (*Avena fatua*), prickly lettuce (*Lactuca serriola*) and Italian thistle (*Carduus pycnocephalus*).

The West Campus includes 624 trees on the site, consisting of 36 species. Of these, 233 trees qualify as heritage trees under the City's Tree Ordinance, as explained in more detail below.¹ Tree species observed during the June 22, 2011 survey included species such as Brazilian pepper (*Schinus terebinthifolius*), blue gum eucalyptus (*Eucalyptus globulus*), Mexican fan palm (*Washingtonia robusta*), Aleppo pine (*Pinus halepensis*), Ngaio tree (*Myoporum laetum*), and glossy privet (*Ligustrum lucidum*). According to the arborist report (Appendix 3.3), most trees were in fair to poor condition due to: lack of irrigation in recent years; possible brackish water intrusion; soil compaction and limited soil volumes; and topping for power line clearance.

Wetlands and Other Waters of the United States

Both the East Campus and West Campus were built on Bay fill, and are, therefore, located on historic salt or brackish water marshes. These marshes were filled in the 1960s to create more land for development. While in some cases such bay fill lands can start to revert to wetland conditions, both campuses are currently paved, landscaped, or are otherwise graded and, thus, no wetlands or waters of the U.S. were observed on either site during the June 22, 2011 field survey.

Special-Status Species

The CNDDDB research compiled a list of special-status plant and wildlife species that have the potential to occur in the vicinity of the Project area from the sources listed below. The results of these queries are presented in Appendix 3.10. For the purposes of this section, special-status species include:

- Species listed, proposed, or candidate species for listing as Threatened or Endangered by the USFWS pursuant to the federal Endangered Species Act (FESA) of 1969, as amended;
- Species listed as Rare, Threatened, or Endangered by the CDFG pursuant to the California Endangered Species Act (CESA) of 1970, as amended;
- Species designated as Fully Protected under Sections 3511 (birds), 4700 (mammals), and 5050 (reptiles and amphibians) of the California Fish and Game Code;
- Species designated by the CDFG as California Species of Concern; and
- Species not currently protected by statute or regulation, but considered rare, threatened or endangered under CEQA (Section 15380).

¹ SBCA Tree Consulting, "Tree Survey - Facebook West Campus," May 18, 2011, Survey Addendum, July 19, 2011.

Table 3.10-1 presents a list of special-status species derived from the above queries potentially occurring in the region, along with a description of their habitat requirements, protection status and a brief discussion of their likelihood to occur within the Project site. Detailed discussions of those species that could occur near the Project site, and potentially be affected by Project development activities, are also provided. Figure 3.10-1 depicts the locations of the listed special-status species.

Western snowy plover (*Charadrius alexandrinus nivosus*). Western snowy plover is federally listed as threatened, and a California Species of Special Concern. This species occurs in coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. The CNDDDB contains two records for western snowy plover within two miles of the Project site, and this species is known to nest in the salt flats near the Project site.

Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*). Saltmarsh common yellowthroat (also known as the San Francisco common yellowthroat) is a CDFG Species of Special Concern. Yellowthroats are found in freshwater marshes, coastal swales, swampy riparian thickets, brackish marshes, salt marshes, and the edges of disturbed weed fields. This yellowthroat occupies the ecotone between moist and upland situations, thus the proximity of various habitat types appears to enhance overall habitat suitability. The saltmarsh common yellowthroat breeds from mid-March to late July. The year-round diet of the common yellowthroat in California is roughly 99.8 percent animal matter, mainly insects and spiders. The CNDDDB contains one record for Saltmarsh common yellowthroat within two miles of the Project site.

California black rail (*Laterallus jamaicensis coturniculus*). The California black rail is State-listed as threatened and a Fully Protected Species under the CDFG Code. Historically, California black rail was known from the San Francisco Bay Area (Bay Area) and the delta of the Sacramento and San Joaquin rivers south along the coast to northern Baja California, and in the San Bernardino-Riverside area, at the Salton Sea, and also along the lower Colorado River north of Yuma in California and Arizona. Most recorded occurrences are in tidal emergent wetlands dominated by pickleweed, or in brackish marshes supporting bulrushes in association with pickleweed. In freshwater, they are usually found in bulrushes, cattails, and saltgrass. This species breeds as early as mid-March to mid-July. The CNDDDB contains one record for California black rail within two miles of the Project site.

California clapper rail (*Rallus longirostris obsoletus*). The California clapper rail is both a federally and State endangered bird and it is also Fully Protected under the CDFG Code. This species range is restricted to tidal and brackish marshes in San Francisco, San Pablo and Suisun Bays, as well as Petaluma and Napa-Sonoma marshes, that are closely associated with pickleweed. Nesting season is from February to August, primarily occurring in the San Francisco estuary, the pair builds a cup nest of vegetation in dense cover above or near the water; nests usually include a domed canopy and an entrance ramp; young leave the nest within hours of hatching. It feeds on aquatic insects, crustaceans and small fish caught by probing, snatching or gleaning from the water, ground or vegetation; seeds, amphibians, worms and other small items may also be eaten. The CNDDDB contains two records for California clapper rail within two miles of the Project sites.

**Table 3.10-1
Special-Status Species Known in the Vicinity of the Project Area**

Scientific Name	Common Name	Fed/State/Other	Habitat	Likelihood of Occurrence at Project Site
Plants				
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	None/None/ S2	Occurs in valley and foothill grasslands (alkaline). Blooms from May to October/November months. Elevation ranges from 1 to 230 meters.	Low: No suitable habitat occurs within or adjacent to Project site. However, there are known occurrence within two miles of the Project site.
<i>Cirsium praeteriens</i>	Lost thistle	None/None/ 1A	Perennial herb that is native to California. Habitat ranges from 0 to 328 feet.	None: Presumed extinct.
<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes bird's-beak	None/None/ S2.2	Coastal salt marsh and swamp habitats ranging from 0 – 10 meters; blooms June – October.	None: While there are known occurrences within two miles, the absence of suitable habitat at the Project site precludes the species from occurring.
<i>Stuckenia filiformis</i>	Slender-leaved pondweed	None/None/ S1S2	Assorted shallow freshwater marshes and swamps ranging from 300 – 2150 meters; blooms May – July.	None: No suitable habitat occurs within or adjacent to the Project site. However, there are known occurrences within two miles of the Project site.
Invertebrates				
<i>Danaus plexippus</i>	Monarch butterfly	None/None/S3. Winter roosting sites protected by CDFG	Eucalyptus groves used as winter roost sites. Typically use the same groves year after year.	None: Eucalyptus trees present, but no records in the CNDDDB of this species utilizing the Project area for winter roosting.
Amphibians				
<i>Ambystoma californiense</i>	California tiger salamander	FT/ST/ S2S3/CSC	Valley and foothill grasslands and adjacent oak woodlands; shelters in rodent burrows and breeds in seasonal wetlands such as vernal pools.	None: No suitable habitat in or adjacent to the Project site.
Reptiles				
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco garter snake	FE/SE/S2	Utilizes a variety of habitats, preferring grasslands or wetlands near ponds, marshes, and sloughs. May overwinter in upland areas away from water.	Low: No suitable habitat at the Project site. However, is known to occur in adjacent salt marshes.
Birds				
<i>Charadrius alexandrinus nivosus</i>	Western snowy plover	FT/None/ CSC S2	Found in coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries.	Low: No suitable habitat on either the East or West Campus. However, is known occur in the nearby salt marshes.
<i>Circus cyaneus</i>	Northern harrier	None/None/ S3/CSC	Grasslands and open habitats; typically nests on the ground in dense vegetation.	None: No suitable habitat within or adjacent to the Project site.

**Table 3.10-1
Special-Status Species Known in the Vicinity of the Project Area**

Scientific Name	Common Name	Fed/State/Other	Habitat	Likelihood of Occurrence at Project Site
<i>Laterallus jamaicensis coturniculus</i>	California black rail	None/None/CSC, S2	Occurs most commonly in tidal emergent wetlands dominated by pickleweed, or in brackish marshes supporting bulrushes in association with pickleweed. In freshwater, usually found in bulrushes, cattails, and saltgrass. Usually found in immediate vicinity of tidal sloughs.	Low: No suitable habitat on either the East or West Campus. However, may occur in the nearby salt marshes.
<i>Melospiza melodia pusillula</i>	Alameda song sparrow	None/None/ CSC, S2	Found in marshland within the Bay.	Low: While there are known occurrence within two miles, the absence of suitable habitat precludes the species from occurring on the Project site.
<i>Rallus longirostris obsoletus</i>	California clapper rail	None/None/ CSC, S2	Salt-water 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-bottomed sloughs.	Low: No suitable habitat on either the East or West Campus. However, may occur in the nearby salt marshes.
<i>Sternula antillarum browni</i>	California least tern	FE/SE/S2S3	Nests are situated on barren to sparsely vegetated places near water, normally on sandy or gravelly substrates. In the Bay region, breeding typically takes place on abandoned salt flats.	Low: No suitable habitat on either the East or West Campus. However, may occur in the nearby salt marshes.
Mammals				
<i>Antrozous pallidus</i>	Pallid bat	None/None/CSC, S3	Found in deserts, grasslands, shrub lands, woodlands and forests. Roosts in rock crevices, exterior eaves and cervices of buildings, and bridges in arid regions. Forages over dry land, typically taking prey from the ground or off of foliage.	Moderate: May occur in buildings on either campus, but particularly the abandoned buildings on the West Campus.
<i>Dipodomys venustus venustus</i>	Santa Cruz kangaroo rat	None/None/ S1	Chamise-redshank chaparral, coastal scrub, mixed chaparral.	None: No suitable habitat on either the East or West Campus and has low likelihood of occurrence due to status. May occur within the adjacent salt marshes.
<i>Lasiurus cinereus</i>	Hoary bat	None/None/S4	Solitary, foliage roosting species that is infrequently observed. Roosts are typically outside of urban areas. Forages in open areas or along habitat edges.	Moderate: Potentially suitable habitat in trees at the Project site and in vegetation along the Bay/salt marshes.
<i>Reithrodontomys raviventris</i>	Salt-marsh harvest mouse	FE/SE/CSC, S1S2	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.	Low: No suitable habitat on either the East or West Campus. However, may occur in the nearby salt marshes.
<i>Sorex vagrans halicoetes</i>	Salt-marsh wandering shrew	None/None/CSC, S1	Occurs in uplands immediately adjacent to salt marshes, where vegetation reaches four inches or less in height, with abundant driftwood for cover.	Low: No suitable habitat on either the East or West Campus. However, may occur in the nearby salt marshes.
<i>Taxidea taxus</i>	American badger	None/None/ CSC, S4	Occurs in dry, open grasslands, fields, and pastures. They are found from high alpine meadows to sea level.	None: No suitable habitat at the Project site.

Table 3.10-1
Special-Status Species Known in the Vicinity of the Project Area

Source: California Department of Fish and Game, Natural Diversity Database, Biogeographic Data Branch, “CNDDDB Query for the Palo Alto, Woodside, Mountain View, La Honda, Mindego Hill, Cupertino, Redwood Point, and San Mateo 7.5 minute USCS quadrangle maps,” June 4, 2011. (Appendix 3.10 of this Draft EIR)

Notes:

Federal

FE Federally listed as Endangered
FT Federally listed as Threatened

State

SE State listed as Endangered
ST State listed as Threatened
CSC California Department of Fish and Game designated “Species of Special Concern”

- | | |
|---|---|
| <p>S1 - Less than 6 Element Occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres</p> <p>S1.1 - very threatened</p> <p>S2 - 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres</p> <p>S2.1 - very threatened</p> | <p>S3 - 21-100 EOs or 3,000-10,000 individuals OR 10,000-50,000 acres</p> <p>S3.1 - very threatened</p> <p>S4 - Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat.</p> |
|---|---|

CNPS

- 1A Presumed extinct
- 1B California Native Plant Society (CNPS) Ranking. Defined as plants that are rare, threatened, or endangered in California and elsewhere.
- 2 California Native Plant Society (CNPS) Ranking. Defined as 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

Likelihood of occurrence evaluations:

A rating of “Moderate” indicates that it is not known if the species is present, but suitable habitat exists on-site.

A rating of “Low” indicates that species was not found during biological surveys conducted to date on the site and may not be expected given the species’ known regional distribution or the quality of habitats located on the site.

A rating of “None” indicates that the taxa would not be expected to occur on the Project area because the site does not include the known range or does not support suitable habitat.

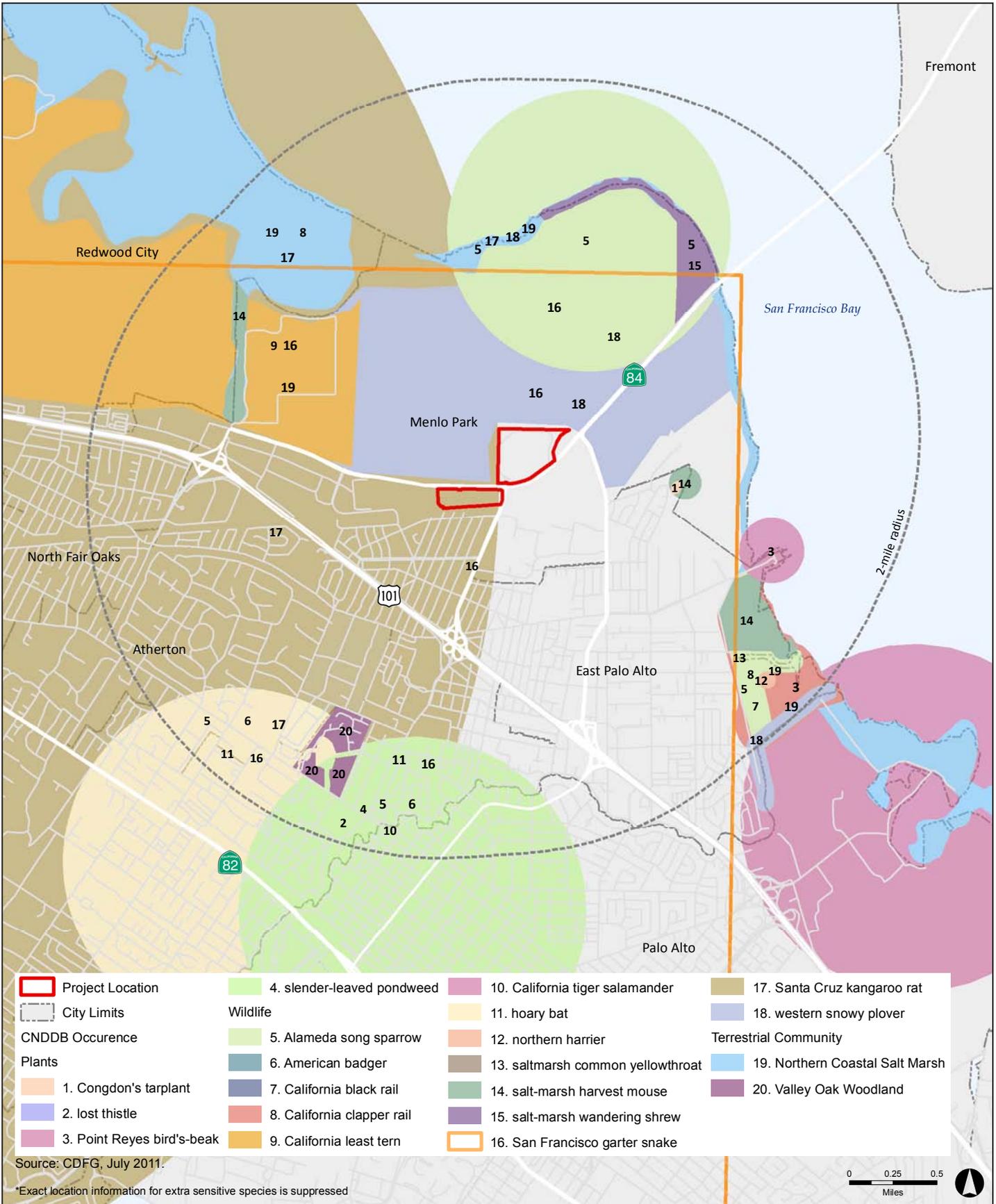


FIGURE 3.10-1
CNDDB Special Status Species

Source: CDFG, 2011.

California least tern (*Sternula antillarum browni*). California least tern is a federal and State Endangered and a Fully Protected Species under the CDFG Code. As its name implies, the least tern is the smallest of North American terns. It is approximately 8.25 to 9 inches long and its wingspan is approximately 19 to 21 inches. The breeding season begins in May, they are single brooded, but replace lost clutches. They nest in colonies on relatively open beaches kept free of vegetation by natural scouring from tidal action. Nests are situated on barren to sparsely vegetated places near water, normally on sandy or gravelly substrates. In the Bay region, breeding typically takes place on abandoned salt flats. The nest is a shallow hollow, usually unlined, or sparingly lined with nearby plant material or small pebbles or shell fragments. They mainly eat small fishes, but also eat shrimp and sometimes other invertebrates. The CNDDDB contains one record for California least tern within two miles of the Project site.

Pallid bat (*Antrozous pallidus*). Pallid bat is a CDFG Species Of Special Concern, but has no federal status. This species uses hollow trees, caves, and rock crevices for roosting, but also uses man-made structures such as mines, old buildings, and bridges if suitable structure and seclusion are available. Threats include loss of roosting habitat, loss of maternity roosts, and illegal extermination during pest control. The CNDDDB contains no records for pallid bat within two miles of the Project site.

Hoary bat (*Lasiurus cinereus*). Hoary bat is a CDFG Species Of Special Concern, but has no federal status. This species is solitary, typically roosting in foliage of riparian trees such as cottonwoods and sycamores, though eucalyptus are also known to be used as well. Roosting trees can occur at the edge of clearings, heavy forests, open wooded glades, and shade trees along urban streets and in city parks. Threats include loss of roosting habitat, loss of maternity roosts, and illegal extermination during pest control. The CNDDDB contains one record for hoary bat within two miles of the Project site.

Salt marsh harvest mouse (*Reithrodontomys raviventris*). Salt marsh harvest mouse is both a federal Endangered Species and a California Endangered Species. This species is typically found in and adjacent to emergent salt marsh habitats dominated by dense growths of pickleweed. Salt marsh harvest mouse requires adjacent, upland areas for escape during high tides. Threats include loss of habitat due to conversion to urban development. The CNDDDB contains three records for Salt marsh harvest mouse within two miles of the Project site.

Salt-marsh wandering shrew (*Sorex vagrans halicoetes*). Salt marsh wandering shrew is a CDFG Species of Special Concern, but has no federal status. This species is endemic to the salt marshes of the Bay, where they prefer a low, dense cover of pickleweed with abundant scattered driftwood. Threats include loss of habitat due to conversion to urban development. The CNDDDB contains one record for salt marsh wandering shrew within two miles of the Project site.

Impacts and Mitigation Measures

Standards of Significance

The Project would have a significant impact with regard to biological resources if it would:

- 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, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, 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.

Methodology

The Project setting was developed by reviewing available information on special-status species known to occur in the Project vicinity, and on wetlands or their habitat and “other waters of the U.S.” This review was supplemented with a field survey on June 22, 2011 to determine which of these species actually occurs or whether potential habitat for these species is present on the Project site. The information review included:

1. A query of the CNDDDB and USFWS species list databases for the Palo Alto, Woodside, Mountain View, La Honda, Mindego Hill, Cupertino, Redwood Point, and San Mateo 7.5 minute USGS quadrangle maps; and
2. A review of the habitat requirements of the special-status species determined to have potential to occur in the Project site through the above queries.

As stated in the setting section, results of the CNDDDB and USFWS queries are provided in Appendix 3.10. A list of species likely to occur in and/or be affected by the Project was derived from the CNDDDB and USFWS database queries, and is provided in Table 3.10-1 and Figure 3.10-1.

Impacts Not Evaluated In Detail

Approximately half of the West Campus is developed, with the remainder vacant, disturbed and largely barren ground. The entire site is zoned M-2, designated General Industrial, and is not a part of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

To the north, across Bayfront Expressway, are salt marshes that are a part of the Refuge. The USFWS is actively pursuing expansion of the Refuge and the protection of the habitats and associated plant and wildlife species contained therein. The USFWS is also closely involved with the South Bay Salt Pond Restoration Project that has active restoration sites near the Project site. However, the West Campus is separated from the Refuge and restoration Project sites by the Bayfront Expressway and a levee. Implementation of the West Campus phase would not involve any construction outside the currently developed/disturbed boundaries. Although all existing buildings and most of the existing landscaping would be removed prior to redevelopment of the site, none of these activities would interfere with the management and/or expansion of the Refuge or with the restoration of the salt ponds. Therefore, there would be *no impact* from implementation of the West Campus phase on an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plans.

Environmental Analysis

BR-1 Impacts on Special-Status Species at the Project Site. The Project at the West Campus could have a potentially significant impact, 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. (PS)

Pallid bats and other potential crevice-roosting bat species are the only mammal species that have a moderate likelihood of occurrence in the vicinity of the Project site. Pallid bats could roost in crevices on the exterior of the unoccupied existing buildings on the West Campus and in hollow trees. Hoary bats, which have a moderate likelihood of occurrence, could roost in the foliage of trees at the West Campus. With implementation of the Project, the existing buildings on the West Campus would be demolished and approximately 375 trees² and several existing shrubs would be removed prior to redevelopment.

Removal of trees and removal of or modification to buildings containing active bat roots, particularly during the nesting season (typically April through August), could result in the loss of individual bats, bat colonies, or their habitat. While adult pallid and hoary bats may be able to escape during tree removal, if tree and shrub removal is to occur during the maternity season (May 1st through October 1st), young bats that cannot yet fly are likely to be killed or injured during vegetation removal. This would result in a “take” of these species. Loss of individual bats, and disruption of maternity roosting bats, resulting in the abandonment of

² Gensler, “Facebook @ Menlo Park West Campus – WL.1 Tree Disposition Plan,” October 21, 2011.

young, or the loss of young through vegetation removal would be a *potentially significant* impact.

MITIGATION MEASURE. The following measures would reduce the potentially significant impacts to roosting and breeding bats at the West Campus to *less than significant*. (LTS)

BR-1.1 Identify and protect roosting and breeding bats on the West Campus. The Project Sponsor shall implement the following measures to protect roosting and breeding bats found in a tree or structure to be removed with implementation of the Project:

1. Prior to tree removal activities on each site, the Project Sponsor shall retain a qualified biologist to conduct a focused survey for bats and potential roosting sites within buildings to be demolished or trees to be removed. The surveys can be conducted by visual identification and can assume presence of hoary bats or the bats can be identified to a species-level with the use of a bat echolocation detector such as an “Anabat” unit. If no roosting sites or bats are found, a letter report confirming absence shall be sent to the California Department of Fish and Game and no further mitigation is required. If roosting sites or hoary bats are found, then the following monitoring and exclusion measures shall be conducted. The letter or surveys and supplemental documents shall be provided to the City prior to demolition permit issuance.
 - a. If bats are found roosting outside of nursery season (May 1st through October 1st), then they shall be evicted as described under (b) below. If bats are found roosting during the nursery season, then they shall be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats shall be evicted as described under (b). Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. A 250-foot (or as determined in consultation with the Department of Fish and Game) buffer zone shall be established around the roosting site within which no construction or tree removal shall occur.
 - b. Eviction of bats shall be conducted using bat exclusion techniques, developed by Bat Conservation International (BCI) and in consultation with the Department of Fish and Game that allow the bats to exit the roosting site but prevent re-entry to the site. This would include, but not be limited to, the installation of one way exclusion devices. The devices shall remain in place for seven days and then the exclusion points and any other potential entrances shall be sealed. This work shall be completed by a BCI recommended exclusion professional. The

exclusion of bats shall be timed and carried concurrently with any scheduled bird exclusion activities.

BR-2 *Indirect Impacts on Special-Status Species Inhabiting the Adjacent Water Marshes. The Project at the West Campus would result in potentially significant indirect effects on special-status bird and mammal species inhabiting the adjacent salt and brackish water marshes due to increased raptor predation. (PS)*

All of the existing buildings on the West Campus would be demolished, and approximately 375 existing trees and several shrubs on the West Campus would be removed prior to construction. This Project would result in a net increase in buildings and possibly tall trees on the West Campus that could serve as new or additional perching or nesting opportunities that would provide raptors or other predatory birds a vantage point from which to prey on special-status species in the adjacent salt marshes such as western snowy plover, salt marsh common yellowthroat, California black rail, California clapper rail, salt marsh harvest mouse and salt marsh wandering shrew. Western snowy plover is known to nest in the nearby salt flats, and the CNDDDB contains records for other special-status species near the West Campus that would be vulnerable to raptor predation. Loss of individual 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 would be a *potentially significant* impact.

MITIGATION MEASURE. The following measure would reduce the potentially significant impacts due to increased raptor predation at the West Campus to *less than significant*. (LTS)

BR-2.1 *Installation of Bird Perching Deterrents on all New Buildings and Other Elevated Structures on the West Campus.* The Project Sponsor shall implement the following measures to reduce impacts to special-status marsh species:

1. For all new buildings to be constructed on the West Campus, the Project Sponsor shall install bird deterrents along suitable perching sites that would allow raptors or other predatory birds a vantage point from which to prey on western snowy plover, salt marsh harvest mouse or other special-status species inhabiting the adjacent salt marshes. Such deterrents may include one or more of the following deterrent devices as appropriate for the individual situation: bird spikes, bird netting, electric shock track, sound deterrents, or other devices approved by CDFG and/or USFWS.
2. Trees used for replacement landscaping shall consist of species that generally do not reach heights of greater than 30 feet in order to limit the distance perching birds could see into the adjacent salt marshes to the north. These trees may include native or non-invasive ornamental species. Species with broad canopies would be preferred, as tall narrow canopies (e.g., palms or conifers) generally provide better hunting perches for raptors.

BR-3 *Loss of Riparian and Other Habitats, Including Wetlands as Defined by Section 404 of the Clean Water Act. The Project at the West Campus would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game, U.S. Fish and Wildlife Service, or as defined by Section 404 of the Clean Water Act. (LTS)*

The western half of the West Campus consists of the existing, unoccupied buildings, parking facilities and associated landscaping, while the eastern portion is vacant land with a mixture of pavement and disturbed, graded soil and gravel. Ornamental trees and shrubs occur along the perimeter of the eastern portion of the West Campus, and in landscaping associated with the existing buildings and parking facilities in the western portion. Based upon the June 22, 2011 field survey, no natural habitat is present within the boundaries of the West Campus. In addition, based on the field survey, no wetlands or other waters of the U.S. are present on or adjacent to the site.

While salt marshes, which are considered a sensitive habitat, occur near the West Campus to the north, the West Campus is separated from the marshes by the Bayfront Expressway and a levee. Project activities on the West Campus would occur within the existing developed and formerly developed boundaries. All of the existing buildings on the West Campus would be demolished, existing pavement and landscaping would be removed, and the entire site would be developed with new buildings. No improvements or alterations to the levee are proposed with implementation of this phase of the Project. Since there is no riparian habitat, salt marsh, State or federally protected wetlands, and/or other sensitive natural community present in any portion of the West Campus, impacts on any riparian habitat, or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS, are considered *less than significant*.

BR-4 *Impacts to Wildlife Corridors or Nursery Sites. The removal of trees, shrubs, or woody vegetation with implementation of the Project at the West Campus would have a potentially significant impact on the movement of 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. (PS)*

Existing shrubs and trees on the West Campus could provide nesting habitat for a variety of native migratory birds. The existing buildings at the West Campus would be demolished, existing landscaping removed, and the site would be developed with new buildings and landscaping. Therefore, most or all of the existing shrubs along the perimeter of the property, along with those associated with the landscaping around the existing buildings on the West Campus would be removed. If nesting migratory birds are present (i.e., nests containing eggs or youths), tree and shrub removal associated with the redevelopment of the West Campus could result in the loss of those birds caused by the direct mortality of adult or young birds, nest destruction, or disturbance of nesting native migratory bird species resulting in nest abandonment and/or the loss of reproductive effort. Native migratory bird species are protected by both State (CDFG Code Sections 3503 and 3513) and federal (MBTA of 1918) laws.

Disruption of nesting birds, resulting in the abandonment of active nests, or the loss of active nests through structure removal would be a *potentially significant* impact.

MITIGATION MEASURE. The following measure would reduce the potentially significant impacts to nesting migratory birds at both the West Campus to *less than significant*. (LTS)

BR-4.1 *Identify and Protect Nesting Migratory Birds at the West Campus.* The Project Sponsor shall implement the following measures to reduce impacts to nesting migratory birds:

- a. To facilitate compliance with State and federal law (Fish and Game Code and the MBTA) and prevent impacts to nesting birds, the Project Sponsor shall avoid the removal of trees, shrubs, or weedy vegetation February 1 through August 31 during the bird nesting period. If no vegetation or tree removal is proposed during the nesting period, no surveys are required. If it is not feasible to avoid the nesting period, a survey for nesting birds shall be conducted by a qualified wildlife biologist no earlier than seven days prior to the removal of trees, shrubs, weedy vegetation, buildings, or other construction activity.
- b. Survey results shall be valid for the tree removals for 21 days following the survey. If the trees are not removed within the 21-day period, then a new survey shall be conducted. The area surveyed shall include all construction areas as well as areas within 150 feet outside the boundaries of the areas to be cleared or as otherwise determined by the biologist.

In the event that an active nest for a protected species of bird is discovered in the areas to be cleared, or in other habitats within 150 feet of construction boundaries, clearing and construction shall be postponed for at least two weeks or until the biologist has determined that the young have fledged (left the nest), the nest is vacated, and there is no evidence of second nesting attempts.

BR-5 *Conflicts with any Local Policies or Ordinances Protecting Biological Resources.* The Project at the West Campus would not result in conflicts with Chapter 13.24 of the Municipal Code (Heritage Tree Ordinance). (LTS)

There are 233 trees on the West Campus that qualify as heritage trees under the City's Heritage Tree Ordinance. These trees consist almost entirely of non-native ornamental species such as thornless honey locust, sweet gum, Brazilian pepper, blue gum eucalyptus, Mexican fan palm, Aleppo pine, and glossy privet. Project designs indicate that approximately 89 of these trees would be removed during clearing of the West Campus for redevelopment. Removal of heritage trees without first obtaining an appropriate permit from the Director of Public Works 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. Since compliance with the tree ordinance is mandatory, this impact would be considered *less than significant*.

The Project at the West Campus would be required to adhere to Chapter 13.24 of the City's Municipal Code, as follows:

- For trees to be retained near construction activities, concurrent with each demolition permit submittal, the Project Sponsor shall submit a heritage tree preservation plan for any trees to be retained, detailing the location of and methods for all tree protection measures, as described in the arborist report (Appendix 3.3). The Project arborist shall submit a letter confirming adequate installation of the tree protection measures. The Project Sponsor shall retain an arborist throughout the term of the Project (demolition through approval of final building permit inspection for the building shells), and the Project arborist shall submit periodic inspection reports to the Building Division. The heritage tree preservation plan shall be subject to review and approval by the Planning Division prior to demolition permit issuance.
- For those Heritage trees to be removed, the Project Sponsor shall submit a site plan with the Heritage Tree Removal Application Permit 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, 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 heritage tree replacement ratio in the City is determined by the director of Community Development. 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 to 1. However, City staff may exercise discretion on the size and number of trees an applicant may be required to install. As such, 20 of the heritage trees to be removed at the West Campus would require a 2 to 1 replacement ratio (for a total of 40 trees) while 69 heritage trees would require a 1.5 to 1 replacement ratio (for a total of 103 trees). Replacement trees must be installed 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.³

Cumulative Analysis

Unless otherwise identified below, the geographic context for the analysis of cumulative biological impacts includes the "Region" as defined by the Bay Area. The analysis accounts for all anticipated cumulative growth within this geographic area as represented by full implementation of the County and City General Plans, including the Tier 1 and Tier 2 projects identified in Section 3.1.

³ City of Menlo Park, Community Development, "Heritage Tree Replacement Procedures," website: http://www.menlopark.org/departments/pln/htree/Htree_Replacement_Pro.pdf, accessed September 9, 2011.

C-BR-1 Cumulative Impacts on Roosting Bats. Removal of buildings, trees, shrubs, or other woody vegetation associated with construction of the Project and other cumulative development would result in impacts to roosting bats. This cumulative impact is less than significant. (LTS)

Tier 1 and Tier 2

As described above under Impact BR-1, activities that result in the removal of existing buildings, trees, shrubs, or other woody vegetation could adversely affect roosting bats, either by causing the loss of bats or the abandonment of an active roosting area. 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 nesting and roosting habitat. Disturbance to these habitats, in combination with the potential loss of similar habitat in the Bay Area, would result in a potentially significant cumulative impact. Pallid bats and other crevice-roosting bat species, if present in the vicinity, could roost in crevices on the exterior of the existing buildings. Hoary bats roost in the foliage of trees, usually away from urban areas and along woodland edges and riparian corridors.

The Project at the West Campus would result in the removal of approximately 375 trees out of a total of 624 trees at the site. Removal of trees and removal of or modification to buildings containing 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. Project Mitigation Measures BR-1.1 and BR-2.1 would reduce the Project's contribution to this potentially significant cumulative impact to less than cumulatively considerable because they would identify and protect breeding roosting bats on the Project site. The Project's cumulative impact would be *less than significant*.

C-BR-2 Cumulative Indirect Impacts on Special-Status Species Inhabiting the Adjacent Water Marshes. Construction of new multi-story buildings associated with the West Campus and other cumulative development would result in indirect effects on special-status bird and mammal species inhabiting the adjacent salt and brackish water marshes due to increased raptor predation. This cumulative impact is less than significant. (LTS)

Tier 1 and Tier 2

Cumulative development activities that result in a net increase in buildings and tall trees could serve as new or additional perching or nesting opportunities for birds of prey. In addition, these features would provide raptors or other predatory birds a vantage point from which to prey on special-status species in the adjacent salt marshes such as western snowy plover, salt marsh common yellowthroat, California black rail, California clapper rail, salt marsh harvest mouse and salt marsh wandering shrew. Cumulative development near salt marsh in the Bay could result in increased loss of individual 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. This would be a potentially significant cumulative impact.

The Project site is located adjacent to salt marsh, and new structures on the West Campus could provide nesting and foraging opportunities for birds of prey. It should be noted that 375 out of a total of 624 trees would be removed on the West Campus, but replacement landscaping would likely include new trees that could provide opportunities for foraging raptors. However, the foraging opportunities that would be provided by Project landscaping would represent a small percentage of the habitat provided in the whole of the Bay Area. Implementation of Mitigation Measure BR-2.2 would reduce the Project's contribution to the potentially significant cumulative impact to less than cumulatively considerable, as it would provide for installation of bird-perching deterrents on all new buildings and other elevated structures on the West Campus. Therefore, the Project's cumulative impact is *less than significant*.

C-BR-3 *Cumulative Loss of Riparian and Other Habitats, Including Wetlands as Defined by Section 404 of the Clean Water Act. The Project at the West Campus, in combination with other cumulative development, would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game, U.S. Fish and Wildlife Service, or as defined by Section 404 of the Clean Water Act. (LTS)*

Tier 1 and Tier 2

As described above under Impact BR-3, while salt marshes, which are considered a sensitive habitat, occur near the West Campus to the north, the West Campus is separated from the marshes by the Bayfront Expressway and a levee. With future cumulative development in the Bay Area, it is reasonable to expect that there could be impacts to riparian habitats, including wetlands. Cumulative impacts could be significant. However, since there is no riparian habitat or other sensitive natural community identified in any portion of the West Campus, the project's contribution to any cumulative impact would be considered *less than significant*.

C-BR-4 *Cumulative Impact on Wildlife Corridors or Nursery Sites. Removal of buildings, trees, shrubs, or other woody vegetation associated with construction of the Project and other cumulative development could result in impacts to nesting birds. This cumulative impact is less than significant. (LTS)*

Tier 1 and Tier 2

As described above under Impact BR-4, activities that result in the removal of existing buildings, trees, shrubs, or other woody vegetation could adversely affect nesting birds, either by causing the loss of young birds or the abandonment of an active nest. With future cumulative 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. Disturbance to these habitats, in combination with the potential loss of similar habitat in the Project area, would result in a potentially significant cumulative impact. Native migratory bird species are protected by both State (CDFG Code Sections 3503 and 3513) and federal (MBTA of 1918) laws and it is assumed that all cumulative development would comply with these regulations, reducing the cumulative impact to less than significant. The vegetation removed by the Project would represent a very small percentage of the total nesting opportunities in the Bay Area. In addition, Mitigation Measure BR-4.1 requires identification and protection of nesting migratory birds, reducing the potential impact to less than significant. Therefore, the cumulative impact is *less than significant*.

C-BR-5 Cumulative Conflicts with any Local Policies or Ordinances Protecting Biological Resources. The Project, in combination with other reasonably foreseeable projects, would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (LTS)

Tier 1 and Tier 2

The cumulative context for an analysis of cumulative impacts regarding conflicts with local policies or ordinances protecting biological resources is the City, as individual jurisdictions have differing criteria to evaluate loss of protected resources. As described above under Impact BR-5, activities that result in the removal of heritage trees could result in conflicts with the City's Heritage Tree Ordinance. With future development in the City, it is reasonable to expect there would be an additional loss of heritage trees. However, compliance with the measures in Chapter 13.24 of the City's 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 requiring tree species best suited to survive and thrive. As such, in combination with other potential projects, the cumulative impact would be *less than significant*.

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