H. T. HARVEY & ASSOCIATES

Ecological Consultants

America Center II Rezoning
Biological Resources Report

Project #3883-01

Prepared for:

Amie Ashton
David J. Powers & Associates, Inc.
1871 The Alameda, Suite 200
San José , CA 95126

Prepared by:

H. T. Harvey & Associates

August 18, 2016

983 University Avenue, Building D • Los Gatos, CA 95032 • Ph: 408.458.3200 • F: 408.458.3210

Table of Contents

Figures

Tables

Appendices

List of Preparers

Steve Rottenborn, Ph.D., Principal/Senior Wildlife Ecologist

Pat Boursier, Ph.D., Senior Plant/Wetland Ecologist

Ginger Bolen, Ph.D., Project Manager/Associate Wildlife Ecologist

Maya Goklany, M.S., Plant Ecologist

Section 1. Introduction

This report describes the biological resources present in the area of the proposed America Center Phase III Rezoning Project, as well as the potential impacts of the proposed Project and measures necessary to reduce impacts to less-than-significant levels under the California Environmental Quality Act (CEQA).

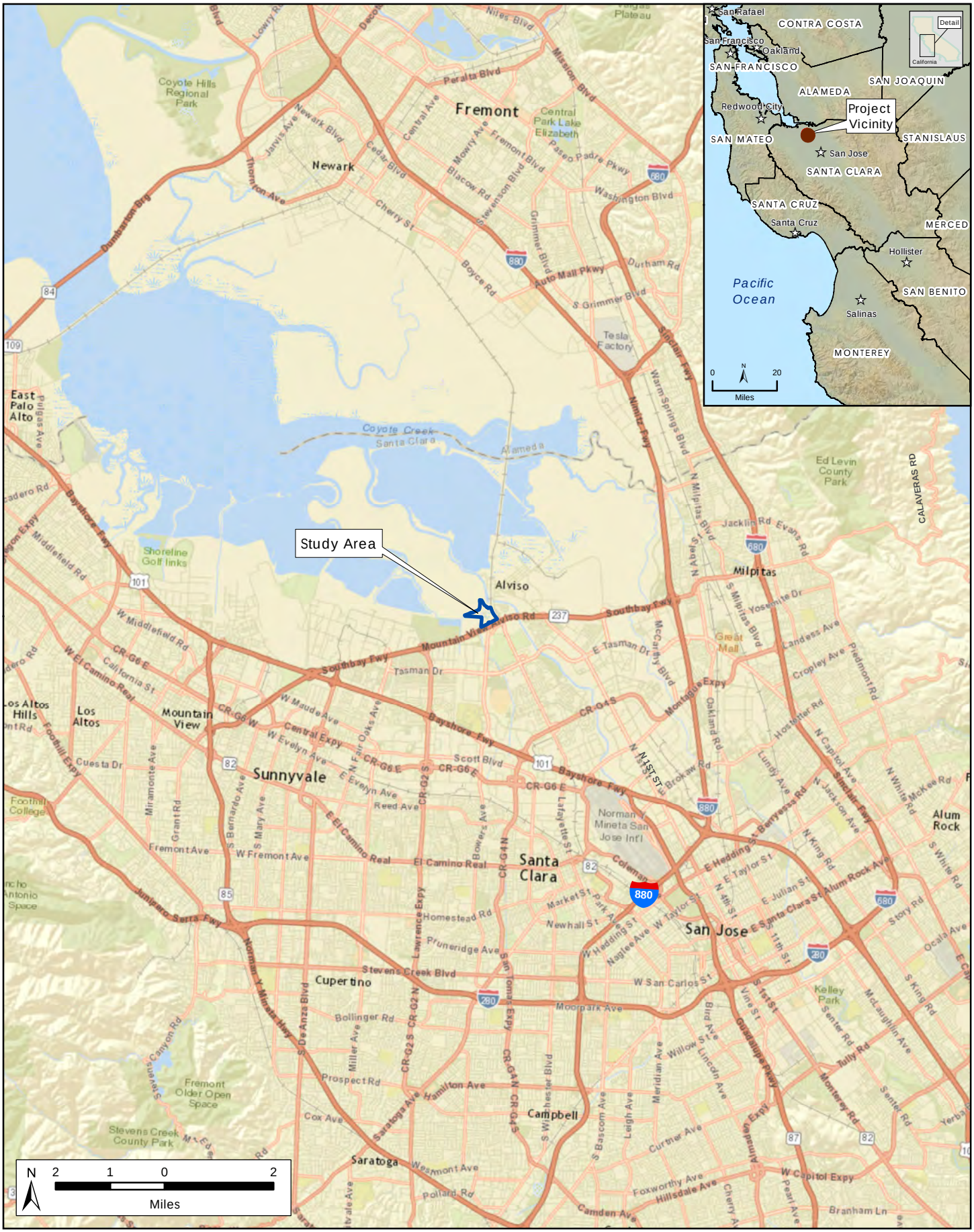
1.1 Project Description

The proposed Project entails modifications to the Planned Development (PD) zoning of the approximately 63-acre (ac) America Center Development (APNs 015-45: -011, -031, -032, -042, -044, -045, -046, -047, and -048) in the Alviso community of the City of San José (hereafter, study area) (Figure 1). The study area is located north of Highway 237 at the terminus of Great America Parkway in the *Milpitas*, *California* 7.5-minute United States Geological Survey (USGS) quadrangle (Figure 2). Located on the closed Highway 237 Landfill, the study area is bounded by San Tomas Aquino Creek to the west, Alviso Slough to the far northeast, South Bay Restoration Pond A8 (former salt pond) to the northwest, the Union Pacific Railroad tracks to the east, and Highway 237 to the south.

There are currently two completed office buildings in the southwest corner of the study area, which contain a total of 420,094 square feet (ft^2) of office/Research and Development (R&D) space. A 175-room hotel (Aloft Santa Clara) was completed in 2015 on the southeast portion of the site. Two additional office buildings (totaling 431,668 ft^2) and an 800-space parking garage are currently under construction at the central and western portions of the study area. Surface parking is available around the perimeter of the existing site. The northern portion of the study area, adjacent to South Bay Restoration Pond A8, is designated as Open Space Preserve. The study area is currently designated Combined Industrial/Commercial and Open Space, Parklands, and Habitat in the *Envision San José 2040 General Plan* (City of San José, 2012), and is zoned Planned Development A.

For the purposes of this analysis, the study area can be characterized in terms of two parts: active land use and open space. The active land use area encompasses the proposed Commercial Office/R&D and Commercial/Hotel land use areas (Figure 3). The open space encompasses the designated Open Space Preserve and the development setback from the riparian corridor along San Thomas Aquino Creek on the western edge of the study area.

The Project proposes to modify the General Development Plan for the current Planned Development Zoning to reflect changes to the boundaries of the land use areas and to increase the allowed building square footage in the Commercial Office/R&D area. Changes to the boundaries of the land use areas covered under the Planned Development rezoning (PDC 15-058) are as follows:



N:\Projects3800\3883-01\Reports\Figure 1 Vicinity Map.mxd swatt

H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure 1. Vicinity Map
American Center II Rezoning (3883-01)
August 2016

N:\Projects3800\3883-01\Reports\Figure 2 Study Area2.mxd swatt

H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure 2. Study Area
American Center II Rezoning (3883-01)
August 2016

N:\Projects3800\3883-01\Reports\Figure 3 Proposed Zoning Boundaries.mxd swatt

H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure 3. Proposed Zoning Boundaries

American Center II Rezoning (3883-01)

August 2016

- Remove the River Commercial area adjacent to the Guadalupe River/Alviso Slough, which is now covered under a separate Planned Development Zoning (PDC15-106), approved in February 2016.
- Adjust the boundaries for the remaining land use areas to reflect minor lot line adjustments.

The total land area planned for Commercial Office/R&D and Commercial/Hotel uses would not increase under the proposed Planned Development rezoning, as all new construction (per the proposed rezoning) would occur within the previously approved active land use area (see Figure 4). However, the Project proposes an increase to the allowed amount of development within the Commercial Office/R&D area. Currently, 897,667 ft² of Commercial Office/R&D space, spread over four six-story buildings (two of which are complete and two of which are currently under construction) is permitted. The proposed rezoning would bring the total approved Commercial Office/R&D space on the site to 1,090,000 ft², which is approximately 190,000 ft² more office/R&D space than was reviewed for the site in the Final Environmental Impact Report (FEIR) for the Legacy Terrace Development Planned Development Rezoning and Prezoning (City of San José 2000). Further, the proposed rezoning would allow the total Commercial Office/R&D square footage to be spread over five six-story buildings.

The proposed zoning changes would allow for the construction of a fifth Commercial Office/R&D building and the expansion of the parking garage approved for the eastern portion of the site (PD 15-053), both of which are also components of this Project. Hereafter, the area that would be directly disturbed by construction of the fifth building and parking garage expansion is referred to as the "proposed development footprint" (see Figure 4). The proposed six-story office building (Building 5) would be 83 ft tall at the top of the roof. A parapet wall would extend 4.5 ft above the roof and a penthouse would extend 11.5 ft above the roof. In addition, the proposed Project would construct a five-story expansion to the south of the previously approved parking structure. Upon full build-out, the parking structure on the eastern portion of the site would contain 1,870 spaces.

The Project would remove 84 small (2.25-11 inch diameter at breast height), predominantly non-native parking lot trees and would plant forty-four 24-inch box trees, including five shoestring acacia (*Acacia stenophylla*), 13 western redbud (*Cercis occidentalis*), five tupelo (*Nyssa sylvatica*), and 21 coast live oak (*Quercus agrifolia*) trees. Landscaping would consist primarily of rushes, grasses, and mulch, with bamboo and vines planted around the proposed parking garage extension.

The proposed Project would not involve substantial changes to the site access and circulation pattern. A single point of ingress/egress to the American Center would continue to be provided at the southern portion of the site, connecting to both Great America Parkway and the Gold Street Connector. On-site circulation is provided via the main driveway entrance, as well as a private road that wraps around the eastern site boundary.

The currently proposed Building 5 and five-story parking garage extension are expected to take approximately 20 months to complete. The Project would be undertaken once ongoing construction of Buildings 3 and 4 and the northern parking garage are complete. It is anticipated that construction would start in spring 2018 and the building would be occupied in late 2019 or 2020.

N:\Projects3800\3883-01\Reports\Figure 4 Habitat and Impacts Map.mxd

H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure 4. Habitats and Impacts Map
American Center II Rezoning (3883-01)
August 2016

Section 2. Methods

2.1 Background Review

Prior to conducting field work, H. T. Harvey & Associates ecologists reviewed the Project plans and description provided by David J. Powers & Associates in July 2016; aerial images (Google Inc. 2016); a USGS topographic map; the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB) (2016); and other relevant scientific literature and technical databases. Previous reports prepared for the Project site and vicinity were also reviewed, including the FEIR for the Legacy Terrace Development Project (City of San José 2000). For the purposes of this report, the "Project vicinity" encompasses a 5-mile (mi) radius surrounding the study area (Figure 1). In addition, for plants, we reviewed all species on current California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1A, 1B, 2A, and 2B lists occurring in the *Milpitas, California* USGS quadrangle and surrounding eight quadrangles (*Calaveras Reservoir*, *Cupertino*, *La Costa Valley*, *Mountain View*, *Newark*, *Niles*, *San José East*, and *San José West*). Quadrangle-level results are not maintained for CRPR 3 and 4 species, so we also conducted a search of the CNPS Inventory records for these species occurring in Santa Clara County (CNPS 2016). In addition, we queried the CNDDB (2016) for natural communities of special concern that occur within the Project region.

2.2 Site Visits

A reconnaissance-level field survey of the study area was conducted by H. T. Harvey & Associates wildlife ecologist, Ginger Bolen, Ph.D., and plant ecologist Maya Goklany, M.S., on July 6, 2016. The purpose of these surveys was to provide a Project-specific impact assessment for the proposed rezoning and development as described above. Specifically, surveys were conducted to (1) assess existing biotic habitats and general wildlife communities in the study area, (2) assess the potential for the Project to impact special-status species and/or their habitats, and (3) identify potential jurisdictional habitats, such as Waters of the U.S./State and riparian habitat.

Biotic habitat mapping utilized a combination of the following three techniques: (1) field data obtained with a Geographic Position System (GPS) unit (Trimble GeoXT™) during the reconnaissance survey, (2) aerial imagery from Google Earth Pro (Google Inc. 2016) viewed on-screen, and (3) review of previous descriptions and maps of habitats in the study area from the FEIR (City of San José 2000). In addition, the City of San José riparian setback along San Tomas Aquino Creek was mapped by collecting GPS data along the landward extent of riparian vegetation associated with the waterway. It should be noted there is no mature tree/shrub-dominated riparian habitat along the reach of San Tomas Aquino Creek that flows along the western edge of the study area. Rather, the stream banks support grassland habitat situated below the top of bank that is technically "riparian" due to its topographic position on the stream banks. The outermost limit of the riparian setback was then mapped 100 ft inland from the landward edge of riparian vegetation (see Section 3.3.5 for additional details on the riparian setback requirements). A riparian setback along Alviso Slough just barely extends into the

extreme northern portion of the study area; this riparian setback was not mapped because it is obviously so far from the active land use area and proposed development footprint that no Project activities will occur in or near this setback.

In addition, focused surveys for Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*, CRPR 1B.1) and suitable burrowing owl (*Athene cunicularia*) roosting and nesting habitat (i.e., burrows of suitable size in low vegetation), and evidence of active or old raptor nests were conducted within the proposed development footprint. Ms. Goklany conducted a focused survey for Congdon's tarplant on portions of the proposed development footprint that support suitable habitat (i.e. ruderal grassland) for this plant taxon. The focused Congdon's tarplant survey was conducted concurrently with the July 2016 reconnaissance survey. Congdon's tarplant blooms from May through October, and prior to surveying the site, a known reference population of Congdon's tarplant was visited to ensure that detection and positive identification of this taxon would be possible. The reference population is located at Sunnyvale Baylands Park, northeast of the junction of Highway 237 and Lawrence Expressway in the city of Sunnyvale, California (37.41057°N, 121.99697°W). This reference population was visited on June 29, 2016 by Ms. Goklany. At this time, the Congdon's tarplant population included a mixture of individuals with fully developed flowers and flower buds, and the plants were positively identified to subspecies. As such, the Congdon's tarplant survey in the proposed development footprint was conducted at an ideal time for detection of this taxon.

Section 3. Regulatory Setting

Biological resources in the study area are regulated by a number of federal, state, and local laws and ordinances, as described below.

3.1 Federal

3.1.1 Clean Water Act

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

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

Project Applicability: A tidal, perennial reach of San Tomas Aquino Creek borders the study area to the west and two palustrine emergent wetlands occur immediately south of the study area; these areas are considered Waters of the U.S. In addition, muted tidal waters in former Pond A8, northwest of the study area, are considered Waters of the U.S. However, no jurisdictional wetlands or other waters are present within the study area, including the proposed development footprint. Because no Project activities are proposed within Waters of the U.S, a permit from the USACE would not be required for the Project.

3.1.2 Rivers and Harbors Act

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

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

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

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

Project Applicability: The study area, including the proposed development footprint, does not overlap with current Section 10 Waters. We verified that the study area includes Historical Section 10 Waters by reviewing maps of historical sloughs, which are depicted on historical maps with a double-blue line[1]. However, no Historical Section 10 Waters are located within the proposed development footprint. Therefore, a Letter of Permission would not be required for the Project.

3.1.3 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects federally listed wildlife species from harm or "take", which is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." Take can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as "take" even if it is unintentional or

[1] The dataset used to determine the extent of historical sloughs integrates several sources of data describing the historical features of tidal marshes in the region, and was developed by the San Francisco Estuary Institute (SFEI 2015). The primary source is the maps of the United States Coast Survey (USCS; later US Coast and Geodetic Survey), a federal agency renowned for the accuracy and detail of its 19th-century maps of America's shoreline. In most parts of the country, these maps provide the best early pictures of coastal and estuarine habitats prior to substantial Euro-American modification.

accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under the FESA only if they occur on federal lands.

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

Project Applicability: No suitable habitat for any federally listed plant or animal species occurs in the study area, and thus no federally listed species are reasonably expected to occur in the study area. Several federally listed species may occur in tidal wetlands and aquatic habitats adjacent to the study area, but as described in Table 1, none occur on the site itself, and none will be impacted by Project activities within the proposed development footprint.

3.1.4 Magnuson-Stevens Fishery Conservation and Management Act

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

Project Applicability: No aquatic habitat, and thus no EFH, is present in the study area. EFH is present in tidal aquatic habitats adjacent to the study area, but no EFH will be impacted by Project activities within the proposed development footprint.

3.1.5 Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section703, prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA protects whole birds, parts of birds, and bird eggs and nests; and prohibits the possession of all nests of protected bird species whether they are active or inactive. An active nest is defined as having eggs or young, as described by the Department of the Interior in its April 16, 2003 Migratory Bird Permit Memorandum. Nest starts (nests that are under construction and do not yet contain eggs) are not protected from destruction.

Project Applicability: All native bird species that occur in the study area are protected under the MBTA.

3.2 State

3.2.1 Porter-Cologne Water Quality Control Act

The SWRCB works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect Waters of the State. Their authority comes from the CWA and the State's Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne broadly defines Waters of the State as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach overlaps and may exceed the boundaries of Waters of the U.S. For example, Water Quality Order No. 2004-0004-DWQ states that "shallow" waters of the State include headwaters, wetlands, and riparian areas. Moreover, the San Francisco Bay Region RWQCB's Assistant Executive Director, has stated that, in practice, the RWQCBs claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters, jurisdiction is taken to the top of bank.

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

Project Applicability: As described above, aquatic and wetland habitats are present in several areas adjacent to the study area, but no aquatic, wetland, or riparian habitats are present within the study area (including the proposed development footprint). Therefore, no areas are present within the Project site that would fall under jurisdiction of the San Francisco RWQCB, and a Section 401 Water Quality Certification will not be required to carry out the development activities proposed as part of the Project.

3.2.2 California Endangered Species Act

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

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

Project Applicability: No suitable habitat for any state listed plant or animal species occurs in the study area, and thus no state listed plants or animals are reasonably expected to occur in the study area. Several state listed species may occur in tidal wetlands and aquatic habitats adjacent to the study area, but as described in Table 1, none occur on the site itself, and none will be impacted by Project activities within the proposed development footprint.

3.2.3 California Environmental Quality Act

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

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

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

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

- CRPR 1A Plants considered extinct.
- CRPR 1B Plants rare, threatened, or endangered in California and elsewhere.
- CRPR 2A Plants considered extinct in California but more common elsewhere.

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

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

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

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

Compliance with CEQA Guidelines Section 15065(a) requires consideration of natural communities of special concern, in addition to plant and wildlife species. Vegetation types of "special concern" are tracked in Rarefind (CNDDB 2016). Further, the CDFW ranks sensitive vegetation alliances based on their global (G) and state (S) rankings analogous to those provided in the CNDDB. Global rankings (G1–G5) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas S rankings are a reflection of the condition of a habitat within California. If an alliance is marked as a G1–G3, all of the associations within it would also be of high priority. The CDFW provides the Vegetation Classification and Mapping Program's currently accepted list of vegetation alliances and associations (CDFW 2010).

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

3.2.4 California Fish and Game Code

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

the particular situation and the type of fish or wildlife at risk. At minimum, CDFW would claim jurisdiction over a stream's bed and bank. In areas that lack a vegetated riparian corridor, CDFW jurisdiction would be the same as USACE jurisdiction. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.

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

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

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

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered "take" by the CDFW.

Project Applicability: As mentioned above under Section 2.1.1 and 2.2.1, the study area does not overlap with the streambanks and bed of San Tomas Aquino Creek or Alviso Slough, or their associated wetlands or riparian habitat. Thus, an LSAA would not be required for the proposed Project. Most native bird, mammal, and other wildlife species that occur in the study area and in the immediate vicinity are protected by the California Fish and Game Code.

3.3 Local

3.3.1 The McAteer-Petris Act

In response to uncoordinated and indiscriminate filling of the Bay, the California legislature passed the McAteer-Petris Act in 1965, establishing the San Francisco Bay Conservation and Development Commission (BCDC) as the management and regulatory agency for the San Francisco Bay and Delta. A permit must be obtained from the BCDC for shoreline projects; dredge and fill activities in the Bay or certain tributaries, salt ponds, or managed wetlands; and Suisun Marsh projects. The limits of BCDC jurisdiction are defined in the *Bay Plan* (BCDC 2012), and include a 100-ft wide band along the shoreline of the Bay. The "shoreline" is defined as all areas that are subject to tidal action from the south end of the Bay to the Golden Gate (Point Bonita-Point Lobos), and to the Sacramento River line (a line between Stake Point and Simmons Point, extended northeasterly to the mouth of Marshall Cut). In addition, the BCDC will take jurisdiction over the marshlands lying between mean high tide and up to 5 ft above mean sea level (MSL), where marsh vegetation is present; tidelands (land lying between mean high tide and mean low tide); and submerged lands (land lying below mean low tide). In relation to salt ponds, the BCDC will claim "salt ponds consisting of all areas which have been diked off from the Bay and have been used during the three years immediately preceding 1969 for the solar evaporation of Bay water in the course of salt production" (BCDC 2012).

Project Applicability: The BCDC may claim the 100-ft shoreline band along San Tomas Aquino Creek in the west portion of the study area and Alviso Slough in the northern portion of the study area. Because wetlands occur within these waterways, the shoreline band would extend landward from 5 ft above MSL, and this elevation line would be used to demarcate the limit of BCDC jurisdiction. An MSL elevation of 0.3 ft National Geodetic Vertical Datum of 1929 (NGVD29) was obtained from the nearest National Oceanic and Atmospheric Administration (NOAA) tidal benchmark station at Gold Street Bridge, Alviso Slough (Station #9414551)[2], and thus, the shoreward limit of BCDC jurisdiction is approximately 5.3 ft NGVD29. However, we verified that BCDC jurisdiction does not extend into the active land use area, including the proposed development footprint, and no Project activities or change in zoning is proposed for lands within BCDC jurisdiction. As such, a BCDC permit would not be required for the development activities proposed as part of the Project.

3.3.2 City of San José Tree Ordinance

According to the City of San José's Municipal Code, Chapter 13.28.220, no person is allowed to unlawfully prune or remove street trees or heritage trees without obtaining a permit. Any tree planted on a street is protected by this ordinance. In addition, any tree which, because of factors including but not limited to its history, girth, height, species, or unique quality, has been found by the City Council to have special significance

[2]Benchmark MSL data for the Gold Street Bridge, Alviso Slough (NOAA 2004) is relative to the mean lower low water (MLLW) at the monitoring station (5.0 ft). The difference between MLLW and the North American Vertical Datum of 1988 (NAVD88) datum were calculated using the guidance provided by Foxgrover et al. (2005). An orthometric height conversion was then performed to calculate the datum shift from NAVD88 to NGVD29 (NOAA n.d.). Finally, the MSL elevation was determined to be approximately 0.3 ft.

to the community may be designated as a heritage tree (also see Chapter 13.28.220 of the Municipal Code). Property owners can contact the City Arborist's Office to nominate a tree for heritage status, and the arborist has the authority to accept or deny requests to add trees to the Heritage Tree List. The list is available on the City of San José's official website (http://www.sanjoseca.gov/index.aspx?NID=1913) and includes the unique identification number, species, girth, and location for each tree.

Permits to prune or remove street trees are issued by the Department of Transportation, whereas permits to impact heritage trees can be obtained from the Department of Planning, Building, and Code Enforcement. Both types of permits will define protection measures that will be required during development activities to limit adverse environmental effects. For instance, heritage tree work must be performed by a certified arborist and must remain in compliance with the trimming, cutting, or pruning standards adopted by the American National Standards Institute.

Project Applicability: No heritage trees are present within the study area. Although 87 existing parking lot trees would be removed from the proposed development footprint as a result of the Project, no street trees would be removed and no permit from the City of San José would be required for the proposed tree removal.

3.3.3 Envision San José 2040

The Envision San José 2040 General Plan (General Plan) (City of San José 2012) includes the following policies related to bird-safe design:

- *Environmental Resource-7.1*: In the area north of Highway 237 design and construct buildings and structures using bird-friendly design and practices to reduce the potential for bird strikes for species associated with the baylands or the riparian habitats of lower Coyote Creek.
- *Environmental Resource-7.6*: Update the Riparian Corridor Policy Study and City of San José design guidelines based on guidance from Responsible Agencies and other interested organizations on best practices for avoiding and minimizing bird strikes at new tall buildings.

Project Applicability: The Project is located within the General Plan area designated as requiring buildings and structures to be designed and constructed using bird-friendly design and practices.

3.3.4 City of San José Bird-Safe Building Design Standards

In March 2015, the City of San José adopted voluntary bird friendly design standards. Although voluntary throughout most of area, the City requires the application of these bird-friendly principles to projects north of Highway 237 per policy ER-7.1 of the Envision San Jose 2040 General Plan (see above).

The measures include but are not limited to the following:

- reduce large areas of transparent or reflective glass,

- locate water features and other bird habitat away from building exteriors to reduce reflection,
- reduce or eliminate the visibility of landscaped areas behind glass,
- reduce or eliminate spotlights on buildings, and
- turn non-emergency lighting off at night, especially during bird migration season (February-May and August-November).

Project Applicability: The Project is located within the area designated as requiring the application of bird friendly design standards and will conform to this requirement.

3.3.5 City of San José Riparian Policy

The City of San José has a riparian buffer policy that is administered through use of a *Riparian Corridor Policy Study* (Policy Study) document that describes suggested buffer widths (City of San José 1999). The Policy Study defines a riparian corridor as any defined stream channel, including the area up to the bank full-flow line, as well as all riparian (streamside) vegetation in contiguous adjacent uplands. Characteristic woody vegetation could include (but is not limited to) willow (*Salix* ssp.), alder (*Alnus* ssp.), box elder (*Acer negundo*), Fremont cottonwood (*Populus fremontii*), bigleaf maple (*Acer macrophyllum*), western sycamore (*Platanus racemosa*), and oaks (*Quercus* ssp.). Stream channels include all perennial and intermittent streams shown as a solid or blue line on USGS topographic maps, and ephemeral streams or "arroyos" with well-defined channels and some evidence of scour or deposition. The Policy Study states that riparian setbacks should be measured 100 ft from the outside edges of riparian habitat or the top of bank, whichever is greater. However, the Policy Study also states that setback distances for individual sites may vary if consultation with the City of San José and a qualified biologist, or other appropriate means, indicates that a smaller or larger setback is more appropriate for consistency with riparian preservation objectives (City of San José 1999).

The *Santa Clara Valley Water Resources Protection Collaborative Guidelines and Standards for Land-Use Near Streams* (*Guidelines and Standards*) document was also reviewed (Santa Clara Valley Water Resources Protection Collaborative [SCVWRP Collaborative] 2007). This document defines the top of bank line as the stream boundary where a majority of normal discharges and channel forming events take place; containing the active channel, active floodplain, and their associated banks. The top of bank along streams with levees should be delineated on the inner edge of the levee (see Chapter 11, SCVWRP Collaborative 2007).

Project Applicability: To verify the lateral extent of San Tomas Aquino Creek, which flows adjacent to the southwest portion of the study area, we mapped the landward edge of riparian vegetation during the July 2016 reconnaissance survey, as described in Section 2.2. In areas lacking vegetation, we mapped the top of bank (measured as the bank-full flow line). This data allowed us to conclude that 6.15 ac of the study area and 0.32 ac of the active land use overlap with the riparian setback. However, the proposed development footprint would not encroach upon the setback and thus, the Project would remain consistent with riparian preservation objectives. Further, although a riparian setback is also present along Alviso Slough in the extreme northern

portion of the study area, we verified that this riparian setback does not overlap with (or even approach) the proposed development footprint and no Project activities will occur in or near this setback.

Section 4. Environmental Setting

4.1 General Project Area Description

The approximately 63-ac study area is bordered by South Bay Restoration Pond A8 to the northwest, Highway 237 to the south, Southern Pacific railroad tracks to the east, Alviso Slough to the far northeast, and San Tomas Aquino Creek to the west. A California Department of Transportation (Caltrans) wetland mitigation site is located west of San Tomas Aquino Creek. The majority of the study area occurs upon the former Marshland Development Corporation Landfill, which was active from 1962 to 1982 and received demolition debris and Class III wastes. Historically, the study area was salt marsh and tidal sloughs. Over a period of several decades, fill material, including Class III solid waste materials, was placed over much of these low lying areas bringing them to higher elevations. Presently, the study area ranges from approximately 13 ft to 65 ft. The site is underlain by one soil type: Xerorthents, trash substratum, 0 to 2 percent slopes (Natural Resource Conservation Service 2016). This soil type generally has a profile consisting of loam, clay loam to a depth of approximately 30 inches; it is well-drained and non-saline to slightly saline.

4.2 Biotic Habitats

Reconnaissance-level surveys identified two habitat types/land uses in the study area, developed/landscaped (32.90 ac) and ruderal grassland (30.13 ac) (Figure 4). These habitats are described in detail below. Plant species observed during the reconnaissance survey are listed in Appendix A.

4.2.1 Ruderal Grassland

Photo 1. Ruderal grassland habitat in the open space.

Vegetation. The majority of the ruderal grassland habitat in the study area occurs within the open space (Photo 1), although two narrow strips of ruderal grassland are present within the active land use area (Photo 2). At the time of the July 2016 reconnaissance survey, this habitat type was dominated by wild oats (*Avena* sp.), and was largely comprised of non-native species that are characteristic of disturbed areas, such as bull mallow (*Malva nicaeensis*), fennel (*Foeniculum vulgare*), smilo grass (*Stipa miliacea*), stinkwort (*Dittrichia graveolens*), and weedy mustard (*Brassica* sp.). Many non-native plants species that are also ranked as "moderately or highly invasive" are common throughout this habitat (California Invasive

Plant Council [Cal-IPC] 2016). For instance, fennel is highly invasive and has severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Moderately invasive species have substantial and apparent ecological impacts (Cal IPC 2016), and include wild oats (*Avena* sp.), stinkwort, and weedy mustard (*Brassica nigra*).

Photo 2. Ruderal grassland habitat in active land use area.

Wildlife. The ruderal grassland in the study area provides breeding habitat for relatively few bird species due to the lack of structural complexity of the vegetation, and wildlife species associated with more extensive grassland habitats in the region, such as the grasshopper sparrow (*Ammodramus savannarum*), are absent from this small patch of habitat. Although ground-nesting species such as the western meadowlark (*Sturnella neglecta*) breed here, most of the bird species using the area during the breeding season nest in the landscaped habitat or more heavily vegetated areas outside the study area, using the ruderal grassland habitat on the site only for foraging. Such species include the white-tailed kite (*Elanus caeruleus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), red-winged blackbird (*Agelaius phoeniceus*), and Brewer's blackbird (*Euphagus cyanocephalus*). Similarly, a few species nesting on nearby bridges, overpasses, or buildings, such as the cliff swallow (*Petrochelidon pyrrhonota*), barn swallow (*Hirundo rustica*), rock pigeon (*Columba livia*), black phoebe (*Sayornis nigricans*), and European starling (*Sturnus vulgaris*), also forage on or over the ruderal grassland habitat on the site. Several other species of birds use the ruderal habitat during the nonbreeding season. These species, which include the Lincoln's sparrow (*Melospiza lincolnii*), savannah sparrow (*Passerculus sandwichensis*), white-crowned sparrow (*Zonotrichia leucophrys*), golden-crowned sparrow (*Zonotrichia atricapilla*), American pipit (*Anthus rubescens*), lesser goldfinch (*Carduelis psaltria*), and American goldfinch (*Carduelis tristis*), forage on the ground or in herbaceous vegetation, primarily for seeds.

Few species of reptiles and amphibians occur in the ruderal grassland in the study area due to its disturbed nature and low habitat heterogeneity. Nevertheless, the western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis melanoleucus*), and common garter snake (*Thamnophis sirtalis*) occur in this type of habitat, and amphibians such as the Sierran chorus frog (*Pseudacris regilla*) and western toad (*Anaxyrus boreas*), which breed in wet areas found adjacent to the study area, forage in this habitat. Small mammals expected to be present include the western harvest mouse (*Reithrodontomys megalotis*), house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), and black rat (*Rattus rattus*). Small burrowing mammals, such as the Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Spermophilus beecheyi*), are also present. Larger mammals, such as the striped skunk

(*Mephitis mephitis*), Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), black-tailed hare (*Lepus californicus*), and red fox (*Vulpes vulpes*) are also likely to occur here.

4.2.2 Developed/Landscaped

Photo 3. Developed/Landscaped habitat.

Vegetation. Developed/landscaped habitat primarily occurs within the active land use portion of the study area, and includes office buildings, parking lots, walking paths, and mulched and irrigated areas (Photos 3 and 4). Landscaping is comprised of a wide variety of ornamental trees, shrubs, grasses, and forbs. Common plant species observed include Peruvian pepper tree (*Schinus molle*), Brazilian pepper tree (*Schinus terebinthifolius*), Mexican fan palm (*Washingtonia robusta*), elm (*Ulmus* sp.), eucalyptus (*Eucalyptus* sp.), buckbrush (*Ceanothus* sp.), and rosemary (*Rosmarinus officinalis*). Mexican fan palm is ranked as moderately invasive by the Cal-IPC (2016). In the outer portions of the study area, developed/landscaped habitat includes trails and maintenance/access roads.

Photo 4. Developed/Landscaped habitat.

Wildlife. The wildlife most often associated with developed/landscaped areas are those that are tolerant of periodic human disturbances, including introduced species such as the European starling, rock pigeon, house mouse, and Norway rat. Numerous common, native species are also able to utilize these habitats, especially the landscaped areas, including the western fence lizard, striped skunk and a variety of birds, including the Anna's hummingbird (*Calypte anna*), California towhee (*Melozone crissalis*), bushtit (*Psaltriparus minimus*), chestnut-backed chickadee (*Poecile rufescens*), and western scrub-jay (*Aphelocoma californica*), which were observed on the site. In addition, the eaves and corners of the buildings on the Project site may be attractive to other nesting and/or roosting bird species in the area, such as the black phoebe. Although numerous trees are present, all except the palm trees are relatively small and do not provide suitable nesting habitat for raptors.

The palm trees, although large, are well maintained (i.e., no skirt of old fronds is present) and do not provide suitable nesting habitat for raptors. An examination of trees on the site failed to find any large cavities that might provide suitable bat roosting habitat. Therefore, large roosting or maternity colonies of bats are not expected to occur in trees on the site.

Section 5. Special-Status Species and Sensitive Habitats

CEQA requires assessment of the effects of a project on species that are protected by state, federal, or local governments as "threatened, rare, or endangered"; such species are typically described as "special-status species". For the purpose of the environmental review of the Project, special-status species have been defined as described below. Impacts on these species are regulated by some of the federal, state, and local laws and ordinances described in Section 3.0 above.

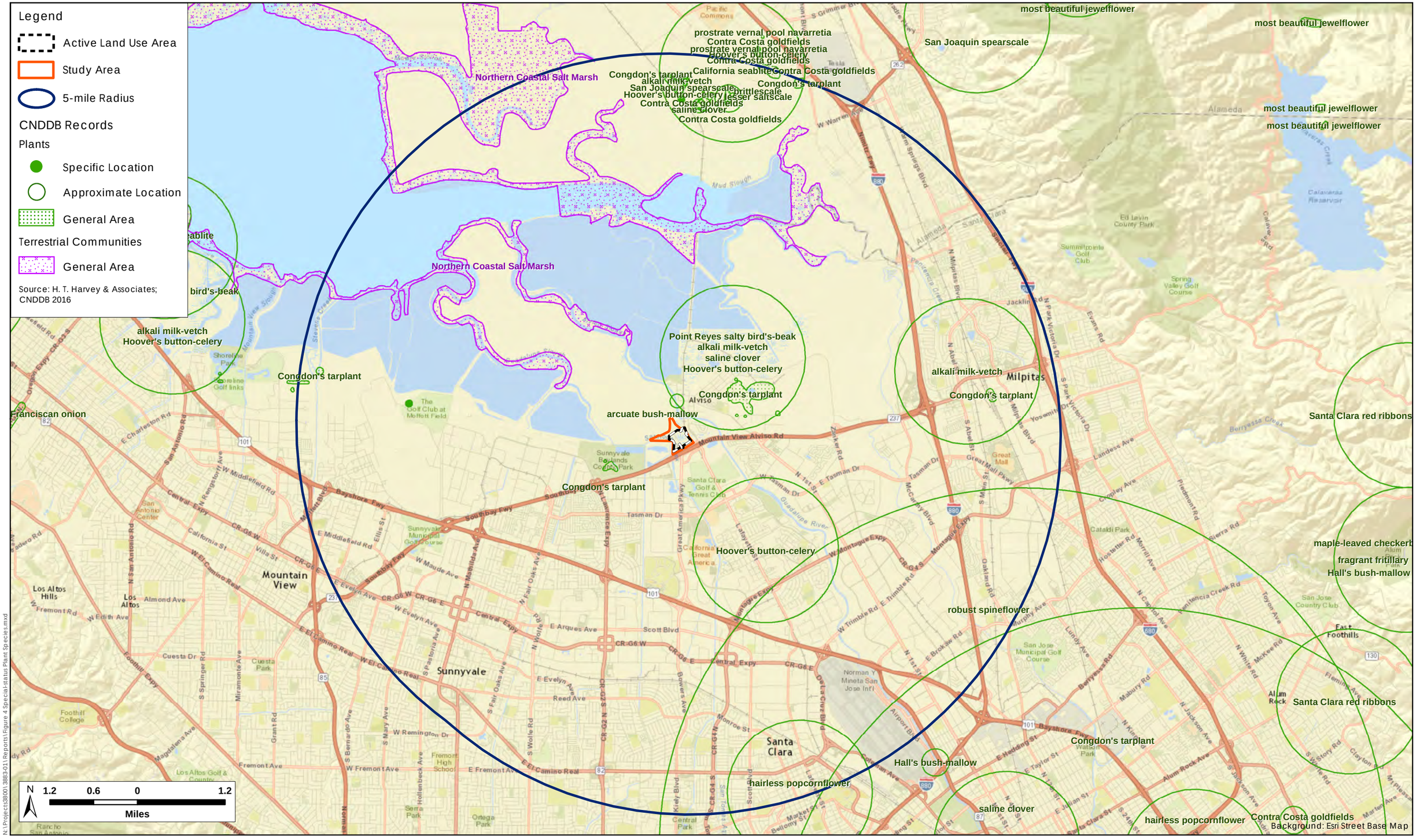
For purposes of this analysis, "special-status" plants are considered plant species that are:

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

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

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).

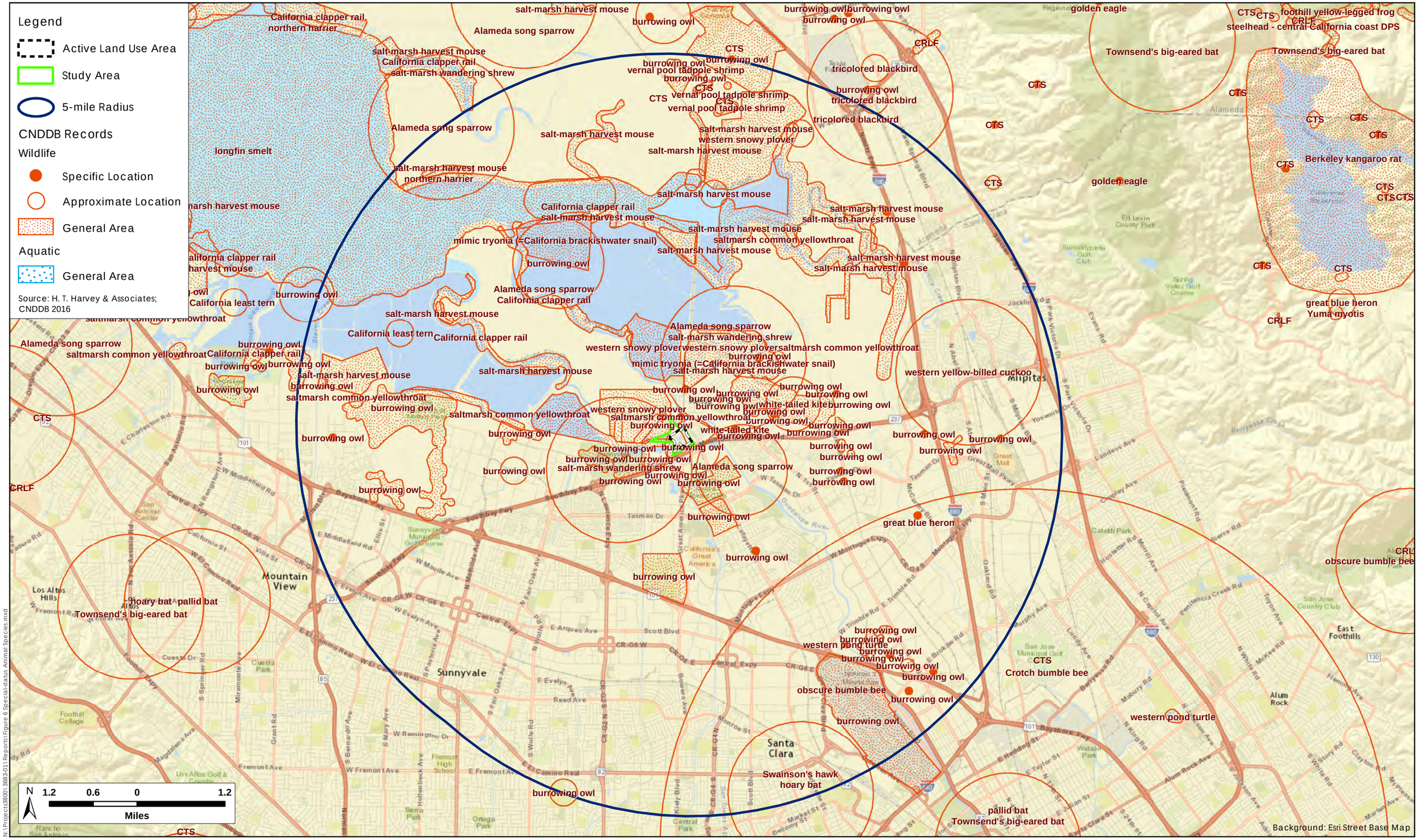
Information concerning threatened, endangered, and other special-status species that potentially occur in the study area was collected from several sources and reviewed by H. T. Harvey & Associates biologists as described in Section 2.1 above. Figure 5 depicts CNDDB records of special-status plant species in the general vicinity of the Project site and Figure 6 depicts CNDDB records of special-status animal species. These generalized maps show areas where special-status species are known to occur or have occurred historically.



N:\Projects\3800\3883-01\Reports\Figure 4 Special-status Plant Species.mxd

H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure **5**. Special-**S**tatus Plant Species
American Center Rezoning Biological Resources Report (3883-01)
August 2016



H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure 6. Special-Status Animal Species
American Center II Rezoning (3883-01)
August 2016

5.1 Special-Status Plant Species

The CNPS (2016) and CNDDB (2016) identify 71 special-status plant species as potentially occurring in at least one of the nine USGS quadrangles containing or surrounding the study area for species in CRPR 1-2, or in Santa Clara County for CRPR 3 and 4 species. The majority of potentially occurring special-status plant species were determined to be absent from the study area for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range on the study area; and/or (4) the species is presumed extirpated. Appendix B lists these plants along with the basis for the determination. Suitable habitat, edaphic requirements, and elevation range were present in the study area for one plant species, Congdon's tarplant, which has been documented by the CNDDB in the Project vicinity (Figure 5) and can persist in disturbed grasslands. An expanded discussion on this species is provided below.

Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*). Federal Listing Status: None; State Listing Status: None; CRPR: 1B.1. Congdon's tarplant is an annual herb in the composite family (Asteraceae) that is endemic to California. It has a variable blooming period extending from May through November. Congdon's tarplant occurs in valley and foothill grassland habitat, floodplains, and swales, particularly those with alkaline substrates; and in disturbed areas with non-native grasses such as wild oats, ripgut brome, Italian ryegrass (*Festuca perennis*), and seaside barley (*Hordeum marinum*) (CNDDB 2016, CNPS 2016, Baldwin et al. 2012, and Santa Clara Valley Water District [SCVWD] 2011). Congdon's tarplant occurs in Alameda, Contra Costa, Monterey, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, and Solano Counties (CNDDB 2016). Five extant populations have been recorded in the CNDDB (2016) as occurring in the Project vicinity. To the north of the Project site in Alameda County, west of Cushing Parkway, populations are located within the boundaries of the Don Edwards San Francisco National Wildlife Refuge (NWR) in the Pacific Commons Preserve, near a complex of vernal pools that were created circa 1998; and in an urban area surrounded by commercial development. Additional populations in the Project vicinity occur in Santa Clara County. Two are located in Sunnyvale, situated on the eastern edge of a hard packed gravel road atop a levee that runs alongside Stevens Creek, and in California annual grassland and seasonal wetland habitats within Sunnyvale Baylands Park. Another population is located in Alviso, to the north of Highway 237 and east of North First Street in annually disked ruderal grassland.

A survey for Congdon's tarplant was conducted within the study area in September 1998 (City of San José 2000). The species was not observed on the site. A focused survey for Congdon's tarplant was also conducted on July 6, 2016 within ruderal grassland habitat in the Project's proposed development footprint (Figure 4; also see Photo 2 above). Within a week of surveying the site, a known reference population of Congdon's tarplant was visited to ensure that detection outside of the bloom period served as the reference population (see Section 2.2 above). Much of the Congdon's tarplant population was in-bloom and flowering during the visit to the park, and the plants were positively identified to subspecies at this time. Congdon's tarplant was not detected in the proposed development footprint.

5.2 Special-Status Animal Species

The legal status and likelihood of occurrence in the study area of special-status animal species known to occur, or potentially occurring, in the Project region are presented in Table 1. Most of the special-status species listed in Table 1 are not expected to occur in the study area because it lacks suitable habitat, is outside the known range of the species, and/or is isolated from the nearest known extant populations by development or otherwise unsuitable habitat. Animal species not expected to occur in the study area for these reasons include the green sturgeon (*Acipenser medirostris*), longfin smelt (*Spirinchus thaleichthys*), Central California coast steelhead (*Oncorhynchus mykiss*), Central Valley fall-run Chinook salmon (*Oncorhynchus tshawytscha*), California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), foothill yellow-legged frog (*Rana boylii*), western pond turtle (*Actinemys marmorata*), long-eared owl (*Asio otus*), short-eared owl (*Asio flammeus*), Swainson's hawk (*Buteo swainsoni*), bald eagle (*Haliaeetus leucocephalus*), California Ridgway's rail (*Rallus obsoletus obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), western snowy plover (*Charadrius alexandrinus nivosus*), California least tern (*Sterna antillarum browni*), yellow-breasted chat (*Icteria virens*), grasshopper sparrow (*Ammodramus savannarum*), salt marsh harvest mouse (*Reithrodontomys raviventris*), salt marsh wandering shrew (*Sorex vagrans halicoetes*), American badger (*Taxidea taxus*), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), ringtail (*Bassariscus astutus*), western red bat (*Lasiurus blossevillii*), and Townsend's big-eared bat (*Corynorhinus townsendii*). Although some of these species, such as the special-status fish and possibly the salt marsh harvest mouse, may occur in wetland or aquatic habitats immediately adjacent to the study area, they are absent from the study area itself, and the proposed development footprint is well removed from suitable habitat for these species.

Several other special-status species have some potential to occur in the study area only as visitors, migrants, or transients, but are not expected to reside or breed on the site, to occur in large numbers, or otherwise to make substantial use of the site. These include the northern harrier (*Circus cyaneus*), loggerhead shrike (*Lanius ludovicianus*), yellow warbler (*Setophaga petechia*), San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), Alameda song sparrow (*Melospiza melodia pusillula*), Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*), tricolored blackbird (*Agelaius tricolor*), pallid bat (*Antrozous pallidus*), American peregrine falcon (*Falco peregrinus anatum*), golden eagle (*Aquila chrysaetos*), and white-tailed kite (*Elanus leucurus*).

Although the 2007 FEIR listed the sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), and merlin (*Falco columbarius*) as California species of special concern potentially occurring on the site, these species have since been removed from the California species of special concern list and are no longer considered to have special status.

Only one special-status animal species, the burrowing owl, potentially breeds in the study area. Expanded descriptions are provided in Appendix C for those species potentially occurring in the study area, as well as species for which resource agencies have expressed particular concern and for which expanded discussion is required.

Table 1. Special-status Animal Species, Their Status, and Potential Occurrence in the Study Area

Name	*Status	Habitat	Potential for Occurrence in the Study Area
Federal or State Endangered, Rare, or Threatened Species			
Green sturgeon (*Acipenser medirostris*)	FT, CSSC	Spawns in large river systems such as the Sacramento River; forages in nearshore oceanic waters, bays, and estuaries.	**Absent.** No aquatic habitat is present in the study area. Green sturgeon may forage infrequently, and in low numbers, in Pond A8, San Tomas Aquino Creek, and Alviso Slough adjacent to the study area; however, these features do not provide suitable spawning habitat, and this species is expected to occur adjacent to the Project area infrequently.
Longfin smelt (*Spirinchus thaleichthys*)	FC, ST	Spawns in fresh water in the upper end of the Bay; occurs year-round in the South Bay.	**Absent.** No aquatic habitat is present in the study area and the species is not known to spawn in aquatic habitat in the Project vicinity. However, pre-spawning adults and yearling juveniles may be present in Pond A8, San Tomas Aquino Creek, and Alviso Slough adjacent to the study area.
Central California Coast steelhead (*Oncorhynchus mykiss*)	FT	Cool streams with suitable spawning habitat and conditions allowing migration between spawning and marine habitats.	**Absent.** No aquatic habitat is present in the study area. Steelhead may forage infrequently, and in low numbers, in Pond A8 adjacent to the study area; however, no spawning habitat is present, and adults on their upstream migration are expected to follow Alviso Slough upstream past Pond A8 (EDAW et al. 2007). Similarly, no spawning habitat is present in the portion of San Tomas Aquino Creek adjacent to the study area and the species is unlikely to spawn upstream due to the presence of barriers to movement (i.e., drop structures). Therefore, San Tomas Aquino Creek is expected to be used only occasionally by wandering steelhead, if at all.
California tiger salamander (*Ambystoma californiense*)	FT, ST	Vernal or temporary pools in annual grasslands or open woodlands.	**Absent.** Populations located on the Valley floor have been extirpated due to habitat loss, and the species is now considered absent from the majority of the valley floor, including the study area (H. T. Harvey & Associates 1999a, 2012; SCVWD 2011). No recent records of California tiger salamanders are located anywhere in the Project vicinity (CNDDB 2016). Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
California red-legged frog (*Rana draytonii*)	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	**Absent.** This species has been extirpated from the majority of the Project region, including the entire urbanized Valley floor, due to development, the alteration of hydrology of its aquatic habitats, and the introduction of non-native predators such as non-native fishes and bullfrogs (*Lithobates catesbeianus*) (H. T. Harvey & Associates 1997; SCVWD 2011). Determined to be absent.
Bald eagle (*Haliaeetus leucocephalus*)	SE, SP	Occurs mainly along seacoasts, rivers, and lakes; nests in tall trees or in cliffs, occasionally on electrical towers. Feeds mostly on fish.	**Absent.** This species has been recorded nesting in the Project region only at inland reservoirs; very rare along the Bay edge. No suitable nesting or foraging habitat is present in the study area. Determined to be absent.
Swainson's hawk (*Buteo swainsoni*)	ST	Nests in trees surrounded by extensive marshland or agricultural foraging habitat.	**Absent.** The Swainson's hawk apparently nested historically in small numbers in Santa Clara County, and there is an 1894 nest record from the Berryessa area (eastern San José) (Bousman 2007a). Currently, the species is known to nest in Santa Clara County only in one location in Coyote Valley; otherwise, it occurs in the Project region only as a very infrequent transient during migration, and neither suitable nesting nor foraging habitat is present in the study area. Determined to be absent.
California Ridgway's rail (*Rallus obsoletus obsoletus*)	FE, SE, SP	Salt marsh habitat dominated by pickleweed and cordgrass (*Spartina* spp.).	**Absent.** No marsh habitat is present in the study area. Further, because California clapper rails typically nest in broader salt marshes with well-developed tidal channels, as opposed to the narrow brackish marsh adjacent to the study area along San Tomas Aquino Creek and Alviso Slough, individuals are expected to occur upstream as far as the study area vicinity only as very rare dispersants.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
California black rail (*Laterallus jamaicensis coturniculus*)	ST, SP	Breeds in fresh, brackish, and tidal salt marsh.	**Absent.** No suitable nesting or foraging habitat for the California black rail is present in the study area. This species occurs in the South Bay primarily as a scarce winter visitor. However, the species has recently been recorded during the breeding season in several parts of the Alviso area (http://groups.yahoo.com/group/south-bay-birds), and it has been confirmed breeding as close to the site as Alviso Marina County Park. Nevertheless, this species has not been recorded in San Tomas Aquino Creek, and few individuals, if any, are expected to forage in the marsh habitat along San Tomas Aquino Creek adjacent to the study area, or along Alviso Slough as far upstream as the northern tip of the study area.
Western snowy plover (*Charadrius alexandrinus nivosus*)	FT, CSSC	Sandy beaches on marine and estuarine shores and salt pans in Bay saline managed ponds.	**Absent.** Suitable habitat for the western snowy plover is not present on or adjacent to the study area. Although snowy plovers previously nested on dry berms within Pond A8 prior to its conversion from a seasonal pond to a tidally-influenced open water pond (CNDDB 2016), water levels in Pond A8 are now managed high enough that suitable nesting habitat for this species is absent. Determined to be absent.
California least tern (*Sterna antillarum browni*)	FE, SE, SP	Nests along the coast on bare or sparsely vegetated, flat substrates. In the South Bay, nests in salt pans and on an old airport runway. Forages for fish in open waters.	**Absent**. Suitable habitat for the California least tern is not present in the study area. Least terns could forage in the nearby Pond A8, particularly during the post-breeding season when they are known to stage in the area. However, least terns have not been recorded in this area (e.g., by birders, western snowy plover surveyors, or others). Determined to be absent.
Tricolored blackbird (*Agelaius tricolor*)	CSSC (nesting colony), SC	Nests near fresh water in dense emergent vegetation.	**Absent as Breeder.** Tricolored blackbirds typically nest in extensive stands of tall emergent herbaceous vegetation in non-tidal freshwater marshes and ponds, which are not present in the study area. This species is not known to nest in tidal habitats in the South Bay, and has not been recorded nesting in the Project vicinity. However, the species is known to forage in the Project vicinity during the nonbreeding season, and may occur in the study area as an uncommon nonbreeding visitor.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
Townsend's big-eared bat (*Corynorhinus townsendii*)	CSSC, SC	Roosts in caves and mine tunnels, and occasionally in deep crevices in trees such as redwoods or in abandoned buildings, in a variety of habitats.	**Absent.** No known extant populations of the Townsend's big-eared bat occur on the Santa Clara Valley floor, and no breeding sites are known from the Project area. Suitable breeding habitat is not present in the study area. Determined to be absent.
Salt marsh harvest mouse (*Reithrodontomys raviventris*)	FE, SE, SP	Salt marsh habitat dominated by common pickleweed or alkali bulrush.	**Absent.** Suitable pickleweed/alkali bulrush-dominated salt marsh habitat for the salt marsh harvest mouse is not present in the study area, and habitat is marginal at best along the edges of the adjacent portions of Pond A8, San Tomas Aquino Creek, and Alviso Slough. Determined to be absent.
California Species of Special Concern			
Central Valley fall-run Chinook salmon (*Oncorhynchus tshawytscha*)	CSSC	Cool rivers and large streams that reach the ocean and that have shallow, partly shaded pools, riffles, and runs.	**Absent.** No aquatic habitat is present in the study area. Chinook may forage infrequently, and in low numbers, in Pond A8 adjacent to the study area; however, adults on their upstream migration are expected to follow Alviso Slough upstream past Pond A8 (EDAW et al. 2007). Similarly, no spawning habitat is present in the portion of San Tomas Aquino Creek adjacent to the study area and the species is unlikely to spawn upstream due to the presence of barriers to movement (i.e., drop structures). Therefore, San Tomas Aquino Creek is expected to be used only occasionally by wandering salmon, if at all. Further, individuals in Alviso Slough and San Tomas Aquino Creek do not represent a native run.
Foothill yellow-legged frog (*Rana boylii*)	CSSC	Partially shaded shallow streams and riffles with a rocky substrate. Occurs in a variety of habitats in coast ranges.	**Absent.** Although the foothill yellow-legged frog occurs in less urbanized areas of Santa Clara County, it has disappeared from farmed and urbanized areas as well as many of the perennial streams below major reservoirs (H. T. Harvey & Associates 1999b), and suitable habitat for foothill yellow-legged frogs is absent from the study area. Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
Western pond turtle (*Actinemys marmorata*)	CSSC	Permanent or nearly permanent water in a variety of habitats.	**Absent.** Although breeding populations of the western pond turtle have been extirpated from most agricultural and urbanized areas in the Project region, individuals of this long-lived species still occur in urban streams and ponds in the Santa Clara Valley. However, no suitable aquatic habitat is present in the study area. Individuals have occasionally been recorded along the lower reaches of the Guadalupe River in the Project vicinity; however, the species is not expected to breed in the study area due to a lack of suitable habitat in the fill soils on the site.
Northern harrier (*Circus cyaneus*)	CSSC (nesting)	Nests in marshes and moist fields, forages over open areas.	**Absent as Breeder.** Northern harriers are not expected to nest in the study area due to a lack of suitable habitat. However, harriers may nest in nearby marsh habitats and forage on the site.
Long-eared owl (*Asio otus*)	CSSC (nesting)	Riparian bottomlands with tall, dense willows and cottonwood stands (also dense live oak and California Bay along upland streams); forages primarily in adjacent open areas.	**Absent.** Long-eared owls are rare resident and occasional winter visitors in Santa Clara County (Bousman 2007b). However, suitable nesting and foraging habitat is not present in the study area. Determined to be absent.
Short-eared owl (*Asio flammeus*)	CSSC (nesting)	Nests in marshes and moist fields, forages over open areas.	**Absent.** The short-eared owl has been recorded nesting in the Project region only in the Palo Alto Flood Control Basin, though it has not been confirmed nesting there since the 1970s. Suitable nesting habitat is not present in the study area. Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
Burrowing owl (*Athene cunicularia*)	CSSC	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels.	**May be Present.** California burrowing owls have been documented historically in the study area (CNDDB 2016), and the 2007 FEIR for the Legacy Terrace Development Planned Development Rezoning and Prezoning (City of San José 2000) permanently set aside 25.3 ac of the ruderal grasslands within the study area as mitigation for impacts on habitat for the burrowing owl. In addition, the FEIR required implementation of a burrowing owl management plan for the mitigation area. However, no owls have been sighted in the study area since 2012 (City of San José 2014, WRA 2010 CNDDB 2016). No suitable roosting or nesting habitat (i.e., ground squirrel burrows) is present within the proposed development footprint; however, the ruderal grasslands within the open space provide ostensibly suitable nesting, foraging, and roosting habitat.
Loggerhead shrike (*Lanius ludovicianus*)	CSSC (nesting)	Nests in tall shrubs and dense trees; forages in grasslands, marshes, and ruderal habitats.	**Absent as Breeder.** Suitable nesting habitat for the loggerhead shrike is present adjacent to the study area and the species likely forages in the grasslands on the site.
Yellow warbler (*Setophaga petechia*)	CSSC (nesting)	Nests in riparian woodlands.	**Absent as Breeder.** Suitable riparian nesting habitat for the yellow warbler is not present on or immediately adjacent to the study area. The species may occur on the site only as a migrant. Because this species is only a species of special concern while nesting, individuals occurring in the study area during migration would not be considered to have special status.
San Francisco common yellowthroat (*Geothlypis trichas sinuosa*)	CSSC	Nests in herbaceous vegetation, usually in wetlands or moist floodplains.	**Absent as Breeder.** The San Francisco common yellowthroat breeds commonly in the marshes along San Tomas Aquino Creek and may occasionally forage in the easternmost portion of the study area. However, no suitable breeding habitat is present in the study area.
Yellow-breasted chat (*Icteria virens*)	CSSC (nesting)	Nests in dense stands of willow and other riparian habitat.	**Absent.** The yellow-breasted chat is a rare breeder, and only slightly more regular transient, in willow-dominated riparian habitats in the Project region. Suitably large, dense stands of riparian habitat are not present on or adjacent to the study area. Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
Alameda song sparrow (*Melospiza melodia pusillula*)	CSSC	Nests in salt marsh, primarily in marsh gumplant and cordgrass along channels.	**Absent as Breeder.** Song sparrows breed commonly in the marshes along San Tomas Aquino Creek and may occasionally forage in the easternmost portion of the study area. Song sparrows in this location may be intergrades between the *pusillula* subspecies typically found in tidal marsh habitats and the *gouldii* subspecies typically found in upland habitats (San Francisco Bay Bird Observatory 2012).
Grasshopper sparrow (*Ammodramus savannarum*)	CSSC (nesting)	Nests and forages in grasslands, meadows, fallow fields, and pastures.	**Absent.** Known to occur in the Project region primarily in grasslands and less frequently disturbed agricultural habitats, mostly in the foothills. Suitably extensive grasslands are not present on or adjacent to the study area. Determined to be absent.
Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*)	CSSC	Nests in pickleweed dominant salt marsh and adjacent ruderal habitat.	**Absent as Breeder.** Suitable pickleweed dominated salt marsh habitat for the Bryant's savannah sparrow is not present in the study area. Small numbers of this subspecies may forage on the site during the nonbreeding season.
Salt marsh wandering shrew (*Sorex vagrans halicoetes*)	CSSC	Medium to high marsh 6 to 8 ft above sea level with abundant driftwood and common pickleweed.	**Absent.** Suitable pickleweed-dominated salt marsh habitat for the salt marsh wandering shrew is not present in the study area or in the adjacent Pond A8. Determined to be absent.
Pallid bat (*Antrozous pallidus*)	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	**Absent as Breeder.** Historically, pallid bats were likely present in a number of locations throughout the Project region, but their populations have declined in recent decades. This species has been extirpated as a breeder from urban areas close to the Bay, as is the case in the study area. No suitable roosting habitat is present in the study area and no known maternity colonies are present on or adjacent to the study area. There is a low probability that the species occurs in the Project vicinity at all due to urbanization; however, individuals from more remote colonies could potentially forage on the study area over open habitats on rare occasions.
Western red bat (*Lasiurus blossevillii*)	CSSC	Roosts in foliage in forest or woodlands, especially in or near riparian habitat.	**Absent.** The western red bat does not breed in the Project vicinity and suitable roosting habitat (i.e., riparian trees) is not present in the study area. Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*)	CSSC	Nests in a variety of habitats including riparian areas, oak woodlands, and scrub.	**Absent.** Currently, with the exception of records along Coyote Creek and along the edges of the Valley, San Francisco dusky-footed woodrats are not know to occur in the more urbanized portions of Santa Clara County (H. T. Harvey & Associates 2010). Further, no suitable habitat is present on or immediately adjacent to the study area. Determined to be absent.
American badger (*Taxidea taxus*)	CSSC	Burrows in grasslands and occasionally in infrequently disked agricultural areas.	**Absent.** Badgers are known to occur in the Project region primarily in extensive grasslands and less frequently disturbed agricultural habitats, mostly in the foothills. Suitably extensive grasslands are not present in the study area. Determined to be absent.
State Fully Protected Species			
American peregrine falcon (*Falco peregrinus anatum*)	SP	Forages in many habitats; nests on cliffs and tall bridges and buildings.	**Absent as Breeder.** Peregrine falcons are known to nest on electrical transmission towers within managed ponds near the Mountain View/Alviso area, but are not known or expected to nest on the transmission towers in the study area. Nevertheless, the peregrine falcon may occur in the study area as an occasional forager, primarily during migration and winter.
Golden eagle (*Aquila chrysaetos*)	SP	Breeds on cliffs or in large trees (rarely on electrical towers), forages in open areas.	**Absent as Breeder.** Suitable breeding habitat for golden eagles is not present on, or immediately adjacent to, the study area. This species is expected to forage in the open habitats of the study area only infrequently, if at all, based on the limited number of recorded occurrences in the Project vicinity by birders.
White-tailed kite (*Elanus leucurus*)	SP	Nests in tall shrubs and trees, forages in grasslands, marshes, and ruderal habitats.	**Absent as Breeder.** Suitable breeding habitat for the white-tailed kit is not present in the study area. However, the species may forage on the site.
Ringtail (*Bassariscus astutus*)	SP	Cavities in rock outcrops and talus slopes, as well as hollows in trees, logs, and snags that occur in riparian habitats and dense woodlands, usually in close proximity to water.	**Absent.** Ringtails occur in less urbanized settings in the South Bay; however, there are no records from the study area. Suitable riparian and dense woodland habitats are absent from the study area. Determined to be absent.

SPECIAL-STATUS SPECIES CODE DESIGNATIONS

FE =	Federally listed Endangered
FT =	Federally listed Threatened
FC =	Federal Candidate for listing
SE =	State listed Endangered
ST =	State listed Threatened
SC =	State Candidate for listing
CSSC =	California Species of Special Concern
SP =	State Fully Protected Species

5.3 Sensitive Natural Communities, Habitats, and Vegetation Alliances

Natural communities have been considered part of the Natural Heritage Conservation triad, along with plants and animals of conservation significance, since the state inception of the Natural Heritage Program in 1979. The CDFW determines the level of rarity and imperilment of vegetation types, and tracks sensitive communities in its Rarefind database (CNDDB 2016). Global rankings (G) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas state (S) rankings are a reflection of the condition of a habitat within California. Natural communities are defined using NatureServe's standard heritage program methodology as follows (California Department of Fish and Game [CDFG] 2007):

G1/S1: Less than 6 viable occurrences or less than 2000 ac.

G2/S2: Between 6 and 20 occurrences or 2000 to 10,000 ac.

G3/S3: Between 21 and 100 occurrences or 10,000 to 50,000 ac.

G4/S4: The community is apparently secure, but factors and threats exist to cause some concern.

G5/S4: The community is demonstrably secure to ineradicable due to being common throughout the world (for global rank) or the state of California (for state rank).

State rankings are further described by the following threat code extensions:

S1.1: Very threatened

S1.2: Threatened

S1.3: No current threats known

In addition to tracking sensitive natural communities, the CDFW also ranks vegetation alliances, defined by repeating patterns of plants across a landscape that reflect climate, soil, water, disturbance, and other environmental factors (Sawyer et al. 2009). If an alliance is marked G1-G3, all of the vegetation associations within it will also be of high priority (CDFG 2007). The CDFW provides the Vegetation Classification and Mapping Program's (VegCAMP) currently accepted list of vegetation alliances and associations (CDFW 2010).

Impacts to CDFW sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under CEQA (Title 14, Division 6, Chapter 3, Appendix G of the California Code of Regulations). Furthermore, aquatic, wetland and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS.

CDFW Sensitive Habitats. A query of sensitive habitats in Rarefind (CNDDB 2016) identified two sensitive habitats as occurring within the nine USGS quadrangles containing or surrounding the study area, sycamore

alluvial woodland (Rank G1/S1.1) and northern coastal salt marsh (Rank G3/S3.2). Sycamore alluvial woodland is dominated by western sycamore (*Platanus racemosa*) which does not occur in the study area. Northern coastal salt marsh is characterized by Holland (1986) as occurring along sheltered inland margins of bays, often co-dominated by pickleweed, cordgrass (*Spartina* spp.), and sometimes saltgrass (*Distichlis spicata*), and this habitat type is not present on the study area. Furthermore, no stream corridors with true attendant riparian habitat, as defined by the CDFW, were identified on the study area.

5.4 Non-Native and Invasive Species

Several non-native, invasive plant species occur in the study area in the ruderal grassland and developed/landscaped habitat. Of these, fennel has the potential to cause the more severe ecological impacts. In addition, Mexican fan palm, stinkwort, weedy mustard, and wild oats were observed in the study area and can have substantial and apparent ecological impacts (Cal-IPC 2016).

Section 6. Impacts and Mitigation Measures

The State CEQA Guidelines provide direction for evaluating the impacts of projects on biological resources and determining which impacts will be significant. CEQA defines a "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." Under State CEQA Guidelines Section 15065, a project's impacts on biological resources are deemed significant if the project would:

A. "substantially reduce the habitat of a fish or wildlife species"
B. "cause a fish or wildlife population to drop below self-sustaining levels"
C. "threaten to eliminate a plant or animal community"
D. "reduce the number or restrict the range of a rare or endangered plant or animal"

In addition to the Section 15065 criteria that trigger mandatory findings of significance, Appendix G of State CEQA Guidelines provides a checklist of other potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the project would:

A. "have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service"
B. "have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service"
C. "have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act"
D. "interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites"
E. "conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance"
F. "conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan"

Potential impacts on existing biological resources were evaluated by comparing the quantity and quality of habitats present in the study area under baseline conditions to the anticipated conditions after implementation of proposed Project activities. Direct and indirect impacts on special-status species and sensitive natural communities were assessed based on the potential for the species, their habitat, or the natural community in question to be disturbed or enhanced by construction or operation of the proposed Project.

The total land area planned for Commercial Office/R&D and Commercial/Hotel uses would not increase under the proposed Project. However, the Project proposes an increase of 190,000 ft² to the allowed amount of development within the active land use area, including the construction of a fifth Commercial Office/R&D building and expansion of the parking garage approved for the eastern portion of the site. Therefore, potential direct impacts on plant and animal species would result from loss of additional habitat due to site excavation, grading, and filling, within the proposed development footprint and mortality of individuals due to construction activities and human uses. Indirect impacts could also occur if remaining fragments of undeveloped habitat are isolated from larger areas of contiguous habitat, because the remaining habitats would be expected to have lower biological values than those prevailing before development. However, all proposed Project development activities are located within the existing active land use area and are surrounded by existing development or construction activities. In addition, the proposed development footprint is located over 700 ft from San Tomas Aquino Creek and the wetland mitigation area to the west; 1,000 ft from Alviso Slough to the northeast; and over 500 ft from the large open space area in the northern portion of the study area. Further, the proposed development footprint is located entirely within existing paved parking areas.

6.1 No Impact

6.1.1 Impacts due to a Conflict with an Adopted Habitat Conservation Plan

The Project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Although the Santa Clara Valley Habitat Plan (VHP) pertains to most of the City of San Jose, the study area is not located within the boundaries of the VHP, although it is within the VHP's expanded study area for burrowing owl conservation. Impacts on burrowing owls and their habitat are addressed separately below.

6.2 Impacts Found to be Less than Significant

6.2.1 Impacts on Upland Habitats and Associated Common Plant and Wildlife Species

Construction of the additional building (Building 5) and parking lot expansion would result in temporary impacts on approximately 2.35 ac of developed/landscaped areas. Although the Project would not result in the permanent loss of developed/landscaped areas, construction would alter and/or remove existing landscaping. Developed/landscaped habitat is abundant and widespread regionally, and is not particularly sensitive or valuable (from the perspective of providing important plant or wildlife habitat). Impacts on this habitat would result in effects on the common (non-special-status) plant and animal species that occur there. These species would experience a direct loss of habitat due to the Project, and the Project could potentially result in the mortality, injury, disturbance, and displacement of individuals of some of these species. Additionally, loss of habitat and displacement of individuals could have indirect effects on populations and habitats outside of the Project site by increasing concentrations of individuals, leading to increases in intra- and interspecific competition and increased pressure on available resources.

However, the common wildlife species that occur in the proposed development footprint are regionally abundant, are present in widely available habitats in the region, and will continue to be present on some portions of the study area following construction. Additionally, the proposed Project would impact only a small proportion of their regional populations, and the number of individuals likely to be displaced by habitat disturbance and loss would be quite small with respect to the amount of suitable habitat available in the area. Thus, impacts on these common species and their habitats resulting from Project activities would not meet the threshold of having a *substantial* adverse effect, and would not be considered significant under CEQA. However, all native bird species are protected from direct take by federal and state statutes (see Section 7.1, *Regulatory Overview for Nesting Birds*). The analysis of the potential for the Project to impact special-status animals found in the upland habitats in the study area is discussed separately below

The plant species observed in the proposed development footprint during the reconnaissance and focused survey for Congdon's tarplant are not regulated under state or federal laws and are not listed as rare by the CNPS. All native plant species found on the site are regionally abundant and common in California. Because Congdon's tarplant was determined to be absent from the proposed development footprint, impacts on plants do not meet the CEQA standard of having a *substantial* adverse effect, and would not be considered significant under CEQA.

6.2.2 Impacts on Nonbreeding Special-Status Birds and Mammals

Several special-status bird species occur in the study area as non-breeding migrants, transients, or foragers, but they are not known or expected to breed or occur in large numbers in the Project area; these include the northern harrier, loggerhead shrike, yellow warbler, San Francisco common yellowthroat, Alameda song sparrow, Bryant's savannah sparrow, tricolored blackbird, American peregrine falcon, golden eagle, and white-tailed kite.

The northern harrier and loggerhead shrike (both California species of special concern) are not expected to nest in the study area due to a lack of suitable habitat. However, harriers and loggerhead shrikes may nest in nearby areas and forage on the site. The Bryant's savannah sparrow (a California species of special concern) is not expected to breed in the study area due to a lack of suitable breeding habitat. However, during the non-breeding season, individuals may forage in open areas throughout the study area. The tricolored blackbird (a State candidate for listing and a California species of special concern) is not known to breed in tidal marshes in the South Bay and is not expected to occur in the study area as a breeder due to a lack of suitable habitat, but individuals may occur occasionally in the study area during migration. The San Francisco common yellowthroat and Alameda song sparrow (both California species of special concern) breed in the marshes along San Tomas Aquino Creek just to the west of the study area, and may occasionally forage in the westernmost portion of the study area. There are a number of occurrence records of the white-tailed kite (a fully protected species) from South Bay wetlands to the west of the Project site, but suitable nesting habitat is not present in the study area. Nevertheless, individuals may occasionally forage in the study area. Similarly, the golden eagle and American peregrine falcon (both fully protected species) are not expected to breed in the study area due to a lack of

suitable nesting habitat. Individuals of these species may occasionally occur on the site while foraging, but are not expected to occur regularly.

The proposed Project would have some potential to impact foraging habitats and/or individuals of these species. Construction activities associated with the Project might result in a temporary direct impact through the alteration of foraging patterns (e.g., avoidance of work sites because of increased noise and activity levels during maintenance activities) but would not result in the loss of individuals. Further, the study area does not provide important foraging habitat used regularly or by large numbers of individuals of any of these species. Therefore, this impact would be less than significant.

The pallid bat (a California species of special concern) may be present in the study area as an occasional forager, but is not expected to breed in the study area due to a lack of suitable habitat, and there are no known maternity colonies on or adjacent to the site. Nevertheless, individuals from more remote colonies could potentially forage over the open grasslands on the site on rare occasions. However, Project construction would not result in the permanent or temporary loss of ruderal grassland foraging habitat or permanent loss of developed/landscaped foraging habitat for pallid bats on the Project site. Therefore, loss of potential foraging habitat would not rise to the CEQA standard of having a substantial adverse effect, and this impact would not constitute a significant impact on this species or its habitat under the CEQA.

6.2.3 Impacts from Avian Collisions with New Buildings

Once Building 5 is constructed, it will increase the risk of avian mortality due to collisions. Building 5 would have glassy facades, which reflect the sky or surrounding vegetation and may not be detectable as collision hazards by birds. Birds will occasionally fly into buildings, particularly those with glassy facades, potentially resulting in injury or mortality. The parking garage extension would not include any glass and therefore is not expected to result in a substantial increase in bird strikes.

The majority of avian collisions with buildings occur within the first 60 ft of the ground (City of San Francisco 2011), where birds spend the majority of their time engaged in foraging, territorial defense, nesting, and roosting activities, and where vegetation is most likely to be reflected in glazed surfaces. However, very tall buildings (e.g., buildings 500 ft or more high) may pose a threat to birds that are migrating through the area, particularly to nocturnal migrants that may not see the buildings or that may be attracted to lights on the buildings.

Although numerous waterbirds are known to congregate at the Don Edwards San Francisco NWR to the north and west of the active land use area, because the area surrounding the active land use area to the east and south is heavily urbanized and contains no habitats of high value to estuarine birds using the Don Edwards San Francisco NWR, we do not expect large numbers of waterbirds to be flying over the Project site at altitudes low enough for bird-strike mortality to occur at Building 5. Although a Caltrans wetland mitigation site is located to the west of the study area, waterbirds flying north to south between this location and the Bay would encounter Project open space but no development.

The bird species with the greatest potential to collide with Building 5 would consist primarily of the common, urban-adapted passerine species that currently use the site, as these are the species that would spend the most time in the vicinity of the new buildings. In addition, the juxtaposition of habitats (e.g., wetlands, baylands, grassland, landscaped, etc.) in the Project vicinity results in large numbers of other passerine species moving through and around the study area, and thus there is potential for migrants and wintering birds to collide with Building 5 as well.

On the Project site, the proposed six-story office building (Building 5) would have a maximum building height of 90 ft 6 inches, and the maximum height of the parking structure extension would be 54 ft. Thus, the maximum height of both structures is much lower than the heights at which most bird migration occurs and they would not pose a substantial collision hazard to migrants flying high through the area. By necessity, the buildings are within the "Bird Collision Zone" (i.e., within the first 60 ft above the ground). However, proposed Building 5 is flanked to the west and northwest by existing Buildings 1 and 2 and to the north by Buildings 3 and 4 (currently under construction), all of which are approximately 95 ft tall. To the south, Building 5 is bordered by the existing Aloft Santa Clara hotel, an approximately 60-ft tall structure, and to the east it will be flanked by the 54-ft tall parking garage extension. Thus, given that Building 5 will be surrounded on all sides by other multi-story buildings that essentially "screen" all or a majority of the 60-ft Bird Collision Zone on Building 5, we do not expect the construction of Building 5 to result in a substantial increase in bird strikes. Birds moving between Building 5 and adjacent buildings will occasionally collide with Building 5, but these would primarily be birds using the marginal-quality habitat within the developed areas around the buildings,

Nevertheless, the Project will be required to conform to the requirements of measure ER 7.1 of the General Plan (City of San José 2014), which requires projects in the area north of Highway 237 to design and construct buildings and structures using bird-friendly design and practices. For example, the Project has incorporated the following measures to minimize the potential for bird collisions:

- No vegetated, glass-walled atria are proposed.
- No glass is included in the design for the parking garage.
- Building 5 will incorporate View Dynamic Glass. Dynamic glass is a smart glass system that allows the tint of the glass to be varied, allowing the tint to be increased at night to prevent brightly lit windows, which can result in the disorientation of migrating birds at night.

Due to the spatial orientation of Building 5 relative to the surrounding buildings as described above, as well as the Project's compliance with measure ER 7.1 of the General Plan, Project impacts resulting from bird collisions would not rise to the CEQA standard of having a *substantial* adverse effect, and these impacts would not constitute a significant impact under the CEQA.

6.2.4 Impacts on Adjacent Riparian Habitat

The Guidelines and Standards, prepared by the Santa Clara Valley Water Resources Protection Collaborative (2007) and adopted by the City, recommend that a protective buffer be established along streams, creeks, and freshwater marshes so that these resources are not impacted by development. Development on the site as a whole (e.g., in the Active Land Use Area) respects a 100-ft riparian setback from San Tomas Aquino Creek and Alviso Slough. Within the study area, this setback contains predominantly ruderal grasslands (see Figure 4). No construction activities are proposed within the 100-ft setback. Thus, the Project would not encroach on the riparian setback and would not result in significant impacts on adjacent riparian habitat.

6.2.5 Impacts on Wildlife Movement Corridors

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

As described above, all proposed development activities are located within the active land use area and are surrounded by existing development or construction activities. Therefore, the Project would not result in fragmentation of natural habitats. To the west of the study area, San Tomas Aquino Creek and the associated riparian wetland corridor provides an important movement pathway for both aquatic and terrestrial species, connecting the associated wetlands to the San Francisco Bay. Similarly, to the east of the study area Alviso Slough provides an important movement pathway for aquatic and terrestrial species. The Project would not result in any loss of aquatic or marsh habitat, and would maintain a setback of 100 ft or more from both of these movement corridors. Thus, aquatic and terrestrial species would continue to be able to move north to south and east to west along San Tomas Aquino Creek and east to south west Alviso Slough following development of the site. Further, terrestrial species would continue to be able to move east to west through the Project area along the banks of Pond A8, within the open space. Therefore, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and this impact is determined to be less than significant.

6.3 Impacts Found to be Less than Significant with Mitigation

6.3.1 Impacts on the Burrowing Owl

Historically, several pairs of burrowing owls are known to have nested in the study area (CNDDB 2016, H. T. Harvey & Associates 1999a), and the 2007 FEIR for the Legacy Terrace Development Planned Development Rezoning and Prezoning (City of San José 2000) permanently set aside 25.3 ac of the ruderal grasslands within the study area as Open Space Preserve as mitigation for impacts on habitat for the burrowing owl. In addition,

26 artificial burrows were constructed, situated around two earthen mounds approximately 4 ft in height and 150 ft in length, and a burrowing owl mitigation and management program (H. T. Harvey & Associates 2000) was implemented. Per the management plan, burrowing owl monitoring of the mitigation site occurred for nine years (2002-2010). During the monitoring period, constructed burrows were repaired and mowing was conducted as needed. More recently, mowing has occurred on a more sporadic basis and artificial burrows have not been maintained. Although evidence of owls was detected during monitoring visits from 2007 to 2011, no owls have been sighted in the study area since 2012, and breeding has not been recorded on the site (City of San José 2014, WRA 2010 CNDDB 2016). Currently, the nearest known active breeding site is located in the buffer lands of the San José-Santa Clara Regional Wastewater Facility approximately 0.9 mi to the northeast.

A focused survey for suitable habitat of the burrowing owl (California species of special concern) within the proposed development footprint was conducted on July 6, 2016. The survey failed to find any burrowing owls or evidence (e.g., whitewash, cast pellets, or feathers) of burrowing owl presence. In addition, no suitable roosting or nesting habitat (i.e., ground squirrel burrows) or foraging habitat was present within the proposed development footprint, which consists entirely of developed areas. Therefore, burrowing owls are not expected to nest, roost, or forage within the proposed development footprint and the project would not result in a loss of suitable habitat for the burrowing owl.

However, potentially suitable roosting and foraging habitat is present within 250-ft (the typical buffer distance recommend around active burrowing owl nests by the CDFW) of the proposed development footprint. Thus, burrowing owls could be present within 250 feet of proposed construction activities, and the potential for construction activities to result in the disturbance of an active nest cannot be ruled out. Heavy ground disturbance, noise, and vibrations caused by proposed construction could potentially disturb foraging or roosting burrowing owls and cause them to move away from work areas. Although the Project is not expected to result in destruction or modification of active nests, project activities could result in the disturbance of nesting adults, possibly to the point of abandonment of active nests with eggs or nestlings. Due to the rarity of the burrowing owl in the region and the effects on burrowing owl populations of the loss of any individuals, the loss of individual burrowing owls or active burrowing owl burrows would be significant under CEQA (Significance Criterion E). Implementation of the following measures would reduce potential impacts on nesting and roosting burrowing owls during Project construction to a less-than-significant level.

Mitigation Measure 1a: Conduct Pre-construction Surveys for Burrowing Owls. Pre-construction surveys for burrowing owls will be conducted prior to the initiation of all Project activities within suitable burrowing owl nesting and roosting habitat (i.e., ruderal grassland habitat with burrows of California ground squirrels). Pre-construction surveys will be completed in conformance with the CDFW's 2012 guidelines (CDFG 2012). An initial habitat assessment will be conducted by a qualified biologist to determine if suitable burrowing owl habitat is present. During the initial site visit, which will be conducted not less than 14 days prior to the onset of ground disturbing activities, a qualified biologist will survey the entire activity area and (to the extent that access allows) the area within 250 ft of the site for suitable burrows that could be used by burrowing owls for nesting or roosting. If no suitable burrowing owl habitat (i.e., ruderal grasslands with burrows of California

ground squirrels) is present, no additional surveys will be required. If suitable burrows are determined to be present within 250 ft of work areas, a qualified biologist will conduct at least one additional survey to investigate each burrow within the survey area for signs of owl use and to determine whether owls are present in areas where they could be affected by proposed activities. The final survey will be conducted within the 24-hour period prior to the initiation of Project activities in any given area.

Mitigation Measure 1b: Implement Buffer Zones for Burrowing Owls. If burrowing owls are present during the nonbreeding season (generally September 1 to January 31), a 150-ft buffer zone will be maintained around the occupied burrow(s), if feasible. If maintaining such a buffer is not feasible, then the buffer must be great enough to avoid injury or mortality of individual owls based on monitoring results. During the breeding season (generally February 1 to August 31), a 250-ft buffer, within which no newly initiated Project-related activities will be permissible, will be maintained between Project activities and occupied burrows. Owls present between February 1 and August 31 will be assumed to be nesting, and the 250-ft protected area will remain in effect until August 31. If monitoring evidence indicates that the owls are no longer nesting or the young owls are foraging independently, the buffer may be reduced based on monitoring results.

Mitigation Measure 1c: Monitor Owls during Construction. Any owls occupying the study area are likely habituated to frequent human disturbances. As a result, they may exhibit a tolerance of greater levels of human disturbance than owls in more natural settings, and work within the standard 250-ft buffer during the nesting season may be able to proceed without disturbing the owls. Therefore, if nesting owls are determined to be present on the site, and Project activities cannot feasibly avoid disturbance of the area within 250 ft of the occupied burrow during the nesting season (i.e., February 1 through August 31) due to other seasonal constraints, a qualified biologist will be present during all activities within 250 ft of the nest to monitor the owls' behavior. If in the opinion of the qualified biologist, the owls are unduly disturbed (i.e., disturbed to the point of harm or reduced reproductive success), all work within 250 ft of the occupied burrow will cease until the nest is determined to no longer by active by a qualified biologist.

6.4 Cumulative Impacts

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

The cumulative impact on biological resources resulting from the Project in combination with other projects in the project area and larger region would be dependent on the relative magnitude of adverse effects of these projects on biological resources compared to the relative benefit of impact avoidance and minimization efforts

prescribed by planning documents, CEQA mitigation measures, and permit requirements for each project; compensatory mitigation and proactive conservation measures associated with each project; and the benefits to biological resources accruing from the VHP. In the absence of such avoidance, minimization, compensatory mitigation, and conservation measures, cumulatively significant impacts on biological resources would occur.

However, the San José General Plan contains conservation measures that would benefit biological resources, as well as measures to avoid, minimize, and mitigate impacts on these resources and the VHP includes numerous conservation measures to offset adverse effects on covered activities. Many projects in the region that impact resources similar to those impacted by the proposed Project will be covered activities under the VHP and will mitigate impacts on sensitive habitats and many special-status species, including the burrowing owl, through that program, which will require payment of fees for habitat restoration. Moreover, the VHP will help to ensure the conservation of the burrowing owl and its habitat throughout the Project region. In addition, all projects located in the portion of San Jose north of Highway 237 will be required to design and construct buildings and structures using bird-friendly design and practices, reducing the potential for bird strikes to adversely affect bird species associated with the baylands or the riparian habitats of lower Coyote Creek.

Further, the Project would implement a number of BMPs and mitigation measures to reduce impacts on both common and special-status species, as described above. Thus, provided that this Project successfully incorporates the mitigation measures described in this biological resources report, the Project will not contribute to substantial cumulative effects on biological resources.

Section 7. Compliance with Additional Laws and Regulations Applicable to Biotic Resources of the Project Site

7.1 Regulatory Overview for Nesting Birds

Construction disturbance during the breeding season (February 1 through August 31, for most species) could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests. This type of impact would not be significant under CEQA for the species that could potentially nest on the Project site due to the local and regional abundances of these species and/or the low magnitude of the potential impact of the Project on these species (i.e., the Project is only expected to impact one or two individual pairs of these species, which is not a significant impact on their regional populations). However, we recommend that the following measures be implemented to ensure that Project activities comply with the MBTA and California Fish and Game Code:

Measure 1. Avoidance. To the extent feasible, construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts on nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in Santa Clara County extends from February 1 through August 31.

Measure 2. Pre-construction/Pre-disturbance Surveys. If it is not possible to schedule construction activities between September 1 and January 31 then pre-construction surveys for nesting birds should be conducted by a qualified ornithologist to ensure that no nests will be disturbed during Project implementation. We recommend that these surveys be conducted no more than seven days prior to the initiation of construction activities. During this survey, the ornithologist will inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and immediately adjacent to the impact areas for nests.

Measure 3. Buffers. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist will determine the extent of a construction-free buffer zone to be established around the nest (typically 300 ft for raptors and 100 ft for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during Project implementation.

Measure 4. Inhibition of Nesting. If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the Project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation, and prevent the potential delay of the Project due to the presence of active nests in these substrates.

Section 8. References

Baldwin, B. G.; D. H. Goldman; D. J. Keil; R. Patterson; T. J. Rosatti; and D. H. Wilken (editors). 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press. Berkeley, California.

Barbour, R. W. and W. H. Davis. 1969. Bats of America. University of Kentucky Press, Lexington, Kentucky.

Basham, M. P. and L. R. Mewaldt. 1987. Salt water tolerance and the distribution of South San Francisco Bay song sparrows. Condor 89:697-709.

Bay Conservation and Development Commission [BCDC]. 2012. San Francisco Bay Plan. Accessed July 2016 from http://www.bcdc.ca.gov/pdf/bayplan/bayplan.pdf.

Bousman, W. G. 2007a. Swainson's hawk *Buteo swainsoni*. Pages 506-507 in W. G. Bousman, editor. Breeding bird atlas of Santa Clara County. Santa Clara Valley Audubon Society, Cupertino, California.

Bousman, W. G. 2007b. Long-eared owl *Asio otus*. Pages 238-239 in W. G. Bousman, editor. Breeding bird atlas of Santa Clara County. Santa Clara Valley Audubon Society, Cupertino, California.

Bousman, W. G. 2007c. Loggerhead shrike *Lanius ludovicianus*. Pages 288-289 in W. G. Bousman, editor. Breeding bird atlas of Santa Clara County. Santa Clara Valley Audubon Society, Cupertino, California.

Bousman, W. G. 2007d. Yellow warbler *Dendroica petechia*. Pages 376-377 in W.G. Bousman, editor. Breeding Bird Atlas of Santa Clara County. Santa Clara Valley Audubon Society, Cupertino, California.

Bousman, W. G. 2007e. Golden eagle *Aquila chrysaetos*. Pp 184-185 in W.G. Bousman, editor. Breeding Bird Atlas of Santa Clara County. Santa Clara Valley Audubon Society, Cupertino, California.

Bousman, W. G. 2007d. White-tailed Kite *Elanus leucurus*. Pp 172-173 in Bousman, W.G., editor. Breeding Bird Atlas of Santa Clara County. Santa Clara Valley Audubon Society, Cupertino, California.

Cade, T. J. and C. P. Woods. 1997. Changes in distribution and abundance of the loggerhead shrike. Conservation Biology 11:21-31.

Cain, J. W., M. L. Morrison, and H. L. Bombay. 2003. Predator activity and nest success of willow flycatchers and yellow warblers. Journal of Wildlife Management 67:600-610.

[Cal-IPC] California Invasive Plant Council. 2016. California Invasive Plant Inventory Database. Accessed July 2016 from http://www.cal-ipc.org/paf/

[CDFG] California Department of Fish and Game. 2007. Vegetation Classification and Mapping Program List of California Vegetation Alliances and Rarity Ranking.

[CDFG] California Department of Fish and Game. 2008. CWHR version 8.2 personal computer program in California Department of Fish and Game, California Interagency Wildlife Task Group.

[CDFG] California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. March 7, 2012.

[CDFW] California Department of Fish and Wildlife. 2010. Vegetation Classification and Mapping Program: Natural Communities List. Accessed February 2015 from http://www.dfg.ca.gov/biogeodata/vegcamp/natural_communities.asp

[CNDDB] California Natural Diversity Database. 2016. Rarefind 5.0. California Department of Fish and Wildlife. Accessed July 2016 from http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp

[CNPS] California Native Plant Society. 2016. Inventory of Rare and Endangered Plants (online edition, Version 9.0). California Native Plant Society. Sacramento, California. Accessed July 2016 from http://www.cnps.org/inventory.

Chan, Y. and H. Spautz. 2008. Alameda song sparrow (*Melospiza melodia pusillula*) in W. D. Shuford and T. Gardali, editors. California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California. Western Field Ornithologists and California Department of Fish and Game, Camarillo, California.

City of San Francisco. 2011. Standards for Bird-Safe Buildings. San Francisco Planning Department. Adopted 14 July 2011.

City of San José. 1999. Riparian Corridor Policy Study. Prepared with The Habitat Restoration Group and Jones and Stokes Associates, Inc. Approved by the City Council.

City of San José. 2000 Final Environmental Impact Report for the Legacy Terrace Development Planned Development Rezoning and Prezoning. February 2000.

City of San José. 2012. Envision San José 2040: General Plan.

City of San José. 2014. Memorandum. California Environmental Quality Act (CEQA) Mitigation Monitoring and Reporting Program Status Report. February 20, 2014.

Coulombe, H. N. 1971. Behavior and population ecology of the burrowing owl, *Speotyto cunicularia*, in the Imperial Valley of California. Condor 73:162-176.

Dunk, J. R. 1995. White-tailed Kite (*Elanus leucurus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/178

Dunk, J. R. and R. J. Cooper. 1994. Territory-size regulation in black-shouldered kites. Auk 111:588-595.

EDAW, Philip Williams and Associates, Ltd. H. T. Harvey & Associates, Brown and Caldwell, and Geomatrix. 2007. South Bay Salt Pond Restoration Project. Final Environmental Impact Statement/Report. December 2007.

Erichsen, E. L., K S. Smallwood, A. M. Commandatore, B. W. Wilson, and M. D. Fry. 1996. White-tailed kite movement and nesting patterns in an agricultural landscape in D. Bird, D. Varland, and J. Negro, editors. Raptors in Human Landscapes. Academic Press, San Diego, California.

Errington, P. L. and L. J. Bennett. 1935. Food habits of burrowing owls in northwestern Iowa. Wilson Bulletin 47:125-128.

Ferguson, H. and J. M. Azerrad. 2004. Management recommendations for Washington's priority species: Volume V. Mammals, pallid bat (*Antrozous pallidus*). Washington Department of Fish and Game.

Fitton, S. D. 2008. Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*) in W. D. Shuford and T. Gardali, editors. California bird species of special concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Western Field Ornithologists and California Department of Fish and Game, Camarillo, California.

Foxgrover, A. C., B. E. Jaffe. G. T. Hovis, C. A. Martin, J. R. Hubbard, M. R. Samant, and S. M. Sullivan. 2005. Hydrographic Survey of South San Francisco Bay, California. U.S. Geological Survey Open File Report 2007-1169.

Gardali, T. and J. G. Evens. 2008. San Francisco common yellowthroat (*Geothlypis trichas sinuosa*) in W. D. Shuford and T. Gardali, editors. California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California. Western Field Ornithologists and California Department of Fish and Game, Camarillo and Sacramento, California.

Gleason, R. L. and T. H. Craig. 1979. Food habits of burrowing owls in southeastern Idaho. Great Basin Naturalist 39:274-276.

Good, R E., R. M. Nielson, H. Sawyer, and L. L. McDonald. 2007. A population estimate for golden eagles in the western United States. Journal of Wildlife Management 71:395-402.

Google Inc. 2016. Google Earth (Version 7.0.3.8542) [Software]. Available from earth.google.com.

Gorman, L. R., D. K. Rosenberg, N. A. Ronan, K. L. Haley, J. A. Gervais, and V. Franke. 2003. Estimation of reproductive rates of burrowing owls. Journal of Wildlife Management 67:493-500.

Green, G. A., R. E. Fitzner, R. G. Anthony, and L. E. Rogers. 1993. Comparative diets of burrowing owls in Oregon and Washington. Northwest Science 67:88-93.

Guzy, M. J. and G. Ritchison. 1999. Common yellowthroat (*Geothlypis trichas*) in A. Poole and F. Gill, editors. The Birds of North America. The Birds of North America, Inc., Philadelphia.

H. T. Harvey & Associates. 1997. Santa Clara Valley Water District California Red-legged Frog Distribution and Status – 1997. June.

H. T. Harvey & Associates. 1999a. Santa Clara Valley Water District California Tiger Salamander Distribution and Status – 1999. Prepared for the Santa Clara Valley Water District.

H. T. Harvey & Associates. 1999b. Santa Clara Valley Water District Foothill Yellow-legged Frog Distribution and status – 1999. December.

H. T. Harvey & Associates. 2000. Draft Legacy Terrace Development Burrowing Owl Habitat Management Plan.

H. T. Harvey & Associates. 2010. Santa Clara Valley Water District San Francisco Dusky-Footed Woodrat Distribution and Status - 2010. Prepared for the Santa Clara Valley Water District.

H. T. Harvey & Associates 2012. Santa Clara Valley Water District California Tiger Salamander Surveys and Site Assessments at Selected Santa Clara County Locations. Prepared for the Santa Clara Valley Water District. August 2012.

Hall L. 2013. pers. comm. to Scott Demers. 22 January 2013.

Haug, E. A. and L. W. Oliphant. 1990. Movements, activity patterns, and habitat use of burrowing owls in Saskatchewan. Journal of Wildlife Management 54:27-35.

Heath, S. K. 2008. Yellow warbler (*Dendroica petechia*) in W. D. Shuford and T. Gardali, editors. California Bird Species of Special concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California. Western Field Ornithologists and California Department of Fish and Game, Camarillo and Sacramento, California.

Holland, R. F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Unpublished report. California Department of Fish and Game, Natural Heritage Division, Sacramento, CA.

Humple, D. 2008. Loggerhead shrike (*Lanius ludovicianus*) (mainland populations) in W. D. Shuford and T. Gardali, editors. California bird species of special concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Western Field Ornithologists and California Department of Fish and Game, Camarillo and Sacramento, California

Johnston, D. S., B. Hepburn, J. Krauel, T. Stewart, and D. Rambaldini. 2006. Winter roosting and foraging ecology of pallid bats in Central Coastal California. Bat Research News 47:115.

Johnston, R. F. 1954. Variation in breeding season and clutch size in song sparrows of the Pacific Coast. Condor 56:268-273.

Johnston, R. F. 1956. Population structure in salt marsh song sparrows. Part I. Environment and annual cycle. Condor 56:268-273.

Kochert, M. N., K. Steenhof, C. L. Mcintyre, and E. H. Craig. 2002. Golden eagle (*Aquila chrysaetos*) in A. Poole and F. Gill, editors. The Birds of North America. The Birds of North America, Inc., Philadelphia.

Lowther, P. E., C. Celada, N. K. Klein, C. C. Rimmer, and D. A. Spector. 1999. Yellow warbler (*Dendroica petechia*) in A. Poole, and F. Gill, editors. The Birds of North America. The Birds of North America, Inc., Philadelphia, PA.

Lutz, R. S. and D. L. Plumpton. 1999. Philopatry and nest site reuse by burrowing owls: Implications for productivity. J. Raptor Research 33:149-153.

Martin, D. J. 1973. Selected aspects of burrowing owl ecology and behavior. Condor 75:446-456.

Menges, T. 1998. Common yellowthroat (*Geothlypis trichas*) in The Riparian Bird Conservation Plan: A Strategy for Reversing the Decline of Riparian-associated Birds in California. California Partners in Flight.

Miner, K. L. and D. C. Stokes. 2005. Bats in the South Coast Ecoregion: Status, conservation, issues, and research needs. USDA Forest Service. Gen. Tech. Rep.

[NOAA] National Oceanic and Atmospheric Administration. 2004. Tidal Benchmark Datum for the Gold Street Bridge, Alviso Slough (Station ID: 9414551). Accessed November 2015 from http://tidesandcurrents.noaa.gov/benchmarks/9414551.html

Natural Resource Conservation Service. 2016. Web Soil Survey. U.S. Department of Agriculture. Accessed July 2016 from: http://websoilsurvey.nrcs.usda.gov

Nur, N., S. Zack, J. Evans, and T. Gardali. 1997. Tidal Marsh Birds of the San Francisco Bay Region: Status Distribution, and Conservation of Five Category 2 Taxa. PRBO Conservation Science final draft report to the United States Geological Survey.

Plumpton, D. L. and R. S. Lutz. 1993a. Nesting habitat use by burrowing owls in Colorado. Journal of Raptor Research 27:175-179.

Plumpton, D. L. and R. S. Lutz. 1993b. Prey selection and food habits of burrowing owls in Colorado. Great Basin Naturalist 53:299-304.

Polite, C. 1990. Black-shouldered Kite *Elanus caeruleus*. In California's Wildlife, Vol II: Birds. D. C. Zeiner, W. F. Laudenslayer Jr., K. E. Mayer, and M. White, Eds. California Department of Fish and Game, California Statewide Wildlife Habitat Relationships System. Pp 120-121.

Rich, T. 1984. Monitoring burrowing owl populations: implications of burrow re-use. Wildlife Society Bulletin 12:178-180.

Rosier, J. R., N. A. Ronan, and D. K. Rosenberg. 2006. Post-breeding dispersal of burrowing owls in an extensive California grassland. American Midland Naturalist 155:162-167.

San Francisco Bay Bird Observatory. 2012. Determining the Breeding Extent of the San Francisco Common Yellowthroat and the Alameda Song Sparrow in Santa Clara County, California. Final Report. 17 December 2012.

[SFEI] San Francisco Estuary Institute (SFEI). 2015. "Santa Clara Valley Historical Ecology GIS Data version 2" Accessed [date retrieved]. http://www.sfei.org/content/santa-clara-valley-historical-ecology-gis-data - See more at: http://www.sfei.org/content/santa-clara-valley-historical-ecology-gis-data#sthash.PevPZzcX.Vd6H7LFR.dpuf

[SCVWRP Collaborative] Santa Clara Valley Water Resources Protection Collaborative. 2007. Guidelines & Standards for Land Use Near Streams. A Manual of Tools, Standards and Procedures to Protect Streams and Streamside Resources in Santa Clara County. Revised July 2006.

Sawyer, J. O., T. Keeler-Wolf and J. M. Evens. 2009. A Manual of California Vegetation [online]. Second Edition. California Native Plant Society. Accessed February 2015 from http://vegetation.cnps.org/

[SCVWD] Santa Clara Valley Water District. 2011. Stream Maintenance Program Update 2011-2022. Final Subsequent Environmental Impact Report.

[SCVWRP Collaborative] Santa Clara Valley Water Resources Protection Collaborative. 2007. Guidelines & Standards for Land Use Near Streams. A Manual of Tools, Standards, and Procedures to Protect Streams and Streamside Resources in Santa Clara County. Revised July 2006.

Thomsen, L. 1971. Behavior and ecology of burrowing owls on the Oakland Municipal Airport. Condor 73:177-192.

Trulio, L. A. 2007. Burrowing owl *Athene cunicularia*. Pages 236-237 in W. G. Bousman, editor. Breeding Bird Atlas of Santa Clara County. Santa Clara Valley Audubon Society, Cupertino, California.

[USFWS] U.S. Fish and Wildlife Service. 1970. Conservation of endangered species and other fish or wildlife: Appendix D. United States list of endangered native fish and wildlife. Federal Register 35:16047-16048.

[USFWS] U.S. Fish and Wildlife Service. 1999. Endangered and threatened wildlife and plants: Final rule to remove the American peregrine falcon from the federal list of endangered and threatened wildlife, and to remove the similarity of appearance provision for free-flying peregrines in the conterminus United States; Final rule. Federal Register 64:46542-46558.

Wilson, D. E. and S. Ruff. 1999. The Smithsonian Book of North American Mammals. Smithsonian Institution Press, Washington, D. C.

WRA. 2010. Burrowing Owl Mitigation Monitoring Year 9 Annual Report Legacy American Center Open Space Preserve San Jose, Santa Clara County California. December 2010.

Yosef, R. 1996. Loggerhead Shrike (*Lanius ludovicianus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/231.

Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, editors. 1990a. California's Wildlife. Volume II: Birds. California Department of Fish and Game, Sacramento, California.

Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, editors. 1990b. California's Wildlife. Volume III: Mammals. California Department of Fish and Game, Sacramento, California.

Appendix A. Plants Observed

Family	Scientific Name	Common Name
Anacardiaceae	*Schinus molle*	Peruvian pepper tree
Anacardiaceae	*Schinus terebinthifolius*	Brazilian pepper tree
Apiaceae	*Foeniculum vulgare*	fennel
Arecaceae	*Washingtonia robusta*	Mexican fan palm
Asteraceae	*Baccharis pilularis*	coyote brush
Asteraceae	*Cirsium vulgare*	bull thistle
Asteraceae	*Dittrichia graveolens*	stnkwort
Asteraceae	*Erigeron canadensis*	horseweed
Asteraceae	*Helminthotheca echioides*	bristly ox-tongue
Asteraceae	*Lactuca serriola*	prickly lettuce
Brassicaceae	*Brassica* sp.	mustard
Lamiaceae	*Rosmarinus officinalis*	rosemary
Malvaceae	*Malva nicaeensis*	bull mallow
Malvaceae	*Malva parviflora*	cheeseweed
Myrtaceae	*Eucalyptus* sp.	eucalyptus
Onagraceae	*Epilobium* sp.	willow herb
Poaceae	*Avena* sp.	wild oats
Poaceae	*Stipa miliacea*	smilo grass
Polygonaceae	*Eriogonum* sp.	buckwheat
Polygonaceae	*Rumex* sp.	willow dock
Rhamnaceae	*Ceanothus* sp.	buckbrush
Ulmaceae	*Ulmus* sp.	elm

Appendix B. Potentially Occurring Special-Status Plants

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
alkali milk-vetch	*Astragalus tener var. tener*	x	x		
arcuate bush-mallow	*Malacothamnus arcuatus*	x			
bay buckwheat	*Eriogonum umbellatum* var. *bahiiforme*	x	x	x	x
big-scale balsamroot	*Balsamorhiza macrolepis*	x	x	x	x
Brewer's calandrinia	*Calandrinia breweri*	x	x		x
Brewer's clarkia	*Clarkia breweri*	x	x	x	x
bristly leptosiphon	*Leptosiphon acicularis*	x		x	x
brittlescale	*Atriplex depressa*	x			
California alkali grass	*Puccinellia simplex*	x			x
California androsace	*Androsace elongata* ssp. *acuta*	x		x	x
California seablite	*Suaeda californica*	x		x	
caper-fruited tropidocarpum	*Tropidocarpum capparideum*	x	x		x
chaparral harebell	*Campanula exigua*	x	x	x	x
chaparral ragwort	*Senecio aphanactis*	x		x	x
clay buckwheat	*Eriogonum argillosum*	x	x	x	x
clustered lady's-slipper	*Cypripedium fasciculatum*	x	x	x	x
coast iris	*Iris longipetala*	x			x
Congdon's tarplant	*Centromadia parryi* ssp. *congdonii*				
Contra Costa goldfields	*Lasthenia conjugens*	x			
cotula navarretia	*Navarretia cotulifolia*	x			x
Delta woolly-marbles	*Psilocarphus brevissimus* var. *multiflorus*	x			x
Diablo helianthella	*Helianthella castanea*	x		x	x
dusky-fruited malacothrix	*Malacothrix phaeocarpa*	x		x	x
elongate copper moss	*Mielichhoferia elongata*	x			x
fragrant fritillary	*Fritillaria liliacea*	x	x		x
Gairdner's yampah	*Perideridia gairdneri* ssp. *gairdneri*	x			x
hairless popcornflower	*Plagiobothrys glaber*	x		x	
Hall's bush-mallow	*Malacothamnus hallii*	x			x
Hickman's popcornflower	*Plagiobothrys chorisianus var. hickmanii*	x			x
Hoover's button-celery	*Eryngium aristulatum* var. *hooveri*	x			
Hospital Canyon larkspur	*Delphinium californicum* ssp. *interius*	x		x	x
Jepson's woolly sunflower	*Eriophyllum jepsonii*	x	x	x	x
large-flowered leptosiphon	*Leptosiphon grandiflorus*	x	x		x
lesser saltscale	*Atriplex minuscula*				
Loma Prieta hoita	*Hoita strobilina*	x	x		x

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
maple-leaved checkerbloom	*Sidalcea malachroides*	x	x		x
Metcalf Canyon jewelflower	*Streptanthus albidus* ssp. *albidus*	x	x	x	x
Mexican mosquito fern	*Azolla microphylla*	x			x
Michael's rein orchid	*Piperia michaelii*	x			x
most beautiful jewelflower	*Streptanthus albidus* ssp. *peramoenus*	x	x	x	x
Mt. Diablo cottonweed	*Micropus amphibolus*	x	x	x	x
Mt. Hamilton fountain thistle	*Cirsium fontinale* var. *campylon*	x	x	x	x
narrow-petaled rein orchid	*Piperia leptopetala*	x		x	x
Oakland star-tulip	*Calochortus umbellatus*	x	x	x	x
Patterson's navarretia	*Navarretia paradoxiclara*	x		x	x
phlox-leaf serpentine bedstraw	*Galium andrewsii ssp. gatense*	x	x	x	x
Point Reyes bird's-beak	*Chloropyron maritimum* ssp. *palustre*	x	x	x	
prostrate vernal pool navarretia	*Navarretia prostrata*	x			
robust spineflower	*Chorizanthe robusta* var. *robusta*	x	x		x
round-leaved filaree	*California macrophylla*	x	x		x
saline clover	*Trifolium hydrophilum*	x	x		
San Antonio Hills monardella	*Monardella antonina* ssp. *antonina*	x		x	x
San Francisco collinsia	*Collinsia multicolor*	x			x
San Francisco wallflower	*Erysimum franciscanum*	x	x		x
San Joaquin spearscale	*Extriplex joaquinana*	x	x		
Santa Clara red ribbons	*Clarkia concinna* ssp. *automixa*	x		x	x
Santa Clara thorn-mint	*Acanthomintha lanceolata*	x	x	x	x
Santa Clara Valley dudleya	*Dudleya abramsii* ssp. *setchellii*	x	x	x	x
Satan's goldenbush	*Isocoma menziesii* var. *diabolica*	x			x
serpentine leptosiphon	*Leptosiphon ambiguus*	x	x	x	x
serpentine sunflower	*Helianthus exilis*	x	x	x	x
slender-leaved pondweed	*Stuckenia filiformis* ssp. *alpina*	x		x	x
smooth lessingia	*Lessingia micradenia* var. *glabrata*	x	x	x	x
South Coast Range morning-glory	*Calystegia collina* ssp. *venusta*	x	x	x	x
spring lessingia	*Lessingia tenuis*	x		x	x
stinkbells	*Fritillaria agrestis*	x	x		x
sylvan microseris	*Microseris sylvatica*	x	x	x	x
Tracy's eriastrum	*Eriastrum tracyi*	x		x	x
western leatherwood	*Dirca occidentalis*	x			x
woodland woolythreads	*Monolopia gracilens*	x	x	x	x
woolly-headed lessingia	*Lessingia hololeuca*	x	x		x

Appendix C. Detailed Descriptions of Special-Status Animal Species Potentially Occurring in Study Area

Tricolored Blackbird (*Agelaius tricolor*). Federal Listing Status: None; State Listing Status: Candidate and Species of Special Concern (Nesting Colony). Tricolored blackbirds are found primarily in the Central Valley and in central and southern coastal areas of California. This species is considered a California species of special concern (at its nesting colonies) due to concerns over the loss of wetland habitats in the state. The tricolored blackbird is highly colonial in its nesting habits, and forms dense nesting colonies that, in some parts of the Central Valley, may consist of up to tens of thousands of pairs. This species typically nests in tall, dense, stands of cattails or tules, but also nests in blackberry (*Rubus* spp.), wild rose (*Rosa* spp.) bushes, and tall herbs. Nesting colonies are usually located near fresh water. Tricolored blackbirds form large, often multi-species flocks during the nonbreeding period and range more widely than during the nesting season.

Suitable nesting habitat is not present in the study area. This species is not known to nest in tidal habitats in the South Bay, and has not been recorded nesting in the Project vicinity. However, the species is known to forage in the Project vicinity during the nonbreeding season, and may occur in the study area as an uncommon nonbreeding visitor.

Northern Harrier (*Circus cyaneus*). Federal Listing Status: None; State Listing Status: Species of Special Concern (Nesting). The northern harrier nests in marshes and grasslands with tall vegetation and sufficient moisture to inhibit accessibility of nest sites to predators. This species forages primarily on small mammals and birds in a variety of open grassland, ruderal, and agricultural habitats. Northern harriers forage in a variety of open habitats, especially during the nonbreeding season. The species is fairly widespread as a forager in grasslands, extensive wetlands, and agricultural areas in the Project region during migration and winter. Northern harriers are not expected to nest in the study area due to a lack of suitable habitat. However, harriers may nest in nearby marsh habitats and forage on the site.

Burrowing Owl (*Athene cunicularia*). Federal Listing Status: None; State Listing Status: Species of Special Concern. Burrowing owls occur year-round in the Santa Clara Valley, using open, agricultural or grassland areas with active small mammal burrows, which they use for nesting and roosting. Typical burrowing owl habitat is treeless (because tall trees provide perches for raptors that can easily prey on burrowing owls), with minimal shrub cover and woody plant encroachment, and low density and foliage height diversity, which allows the owls to observe approaches to their nest or roost burrows. In the San Francisco Bay Area, burrowing owls are chiefly associated with burrows of California ground squirrels, which, in addition to providing nesting, roosting, and escape burrows, improve habitat for burrowing owls in other ways. For example, burrowing owls are known to favor areas with short, sparse vegetation (Coulombe 1971, Haug and Oliphant 1990, Plumpton and Lutz 1993a), which provides visual protection from avian predators and foraging habitat, and ground

squirrel colonies maintain short vegetation height. In the absence of ground squirrel populations, habitats soon become unsuitable for occupancy by owls.

Burrowing owls are diet generalists. Insects, small mammals, birds, and occasionally amphibians and reptiles may be eaten (Errington and Bennett 1935, Thomsen 1971, Green et al. 1993, Plumpton and Lutz 1993b). Prey size and availability may be more important than prey species. Numerically, insect prey are most often represented, while small mammal prey (e.g., mice and voles) comprise the majority of biomass intake.

The burrowing owl nesting season as recognized by the CDFW runs from February 1 through August 31. In Santa Clara County, burrowing owl families with non-flying young have been found as early as March 30, suggesting egg-laying dates in mid to late February, and fledged young still dependent on adults have been found into late August (Trulio 2007). After nesting is completed, adult owls may remain in their nesting burrows or in nearby burrows, or they may migrate and over-winter elsewhere (Gorman et al. 2003). Young birds disperse across the landscape from 0.1 mi to 35 mi from their natal burrows (Rosier et al. 2006). Philopatry (the tendency for individuals to breed at or near their place of birth), site tenacity (the tendency for individuals to breed at or near their prior nest location), and nest burrow reuse have been well documented for burrowing owls (Martin 1973, Gleason 1978, Rich 1984, Plumpton and Lutz 1993a), and burrowing owls may return to a nesting site and attempt to nest even after the site has been developed. Further, past reproductive success may influence future site reoccupancy. Female burrowing owls with large broods tend to return to previously occupied nest sites, while females that fail to breed, or which produce small broods, may change nest territories in subsequent years (Lutz and Plumpton 1999).

Historically, several pairs of burrowing owls are known to have nested within the study area (CNDDB 2016, City of San José 2000), and the 2007 FEIR for the Legacy Terrace Development Planned Development Rezoning and Prezoning (City of San José 2000) permanently set aside 25.3 ac of the ruderal grasslands within the study area as mitigation for impacts on habitat for the burrowing owl. In addition, 26 artificial burrows were constructed, situated around two earthen mounds approximately 4 ft in height and 150 ft in length, and a burrowing owl mitigation and management program (H. T. Harvey & Associates 2000) was implemented. Per the management plan, burrowing owl monitoring of the mitigation site occurred for nine years (2002-2010). During the monitoring period, constructed burrows were repaired and mowing was conducted as needed. Although evidence of owls was detected during monitoring visits from 2007 to 2011, no owls have been sighted in the study area since 2012 and breeding has not been recorded on the site (City of San José 2014, WRA 2010 CNDDB 2016). Currently, the nearest known active breeding site is located in the buffer lands of the San José-Santa Clara Regional Wastewater Facility approximately 0.9 mi to the northeast (CNDDB 2016).

A focused survey for suitable habitat of the burrowing owl within the proposed development footprint was conducted on July 6, 2016. The survey failed to find any burrowing owls or evidence (e.g., whitewash, cast pellets, or feathers) of burrowing owl presence. In addition, no suitable roosting or nesting habitat (i.e., ground squirrel burrows) was present within the proposed development footprint. Therefore, burrowing owls are not

expected to roost within the proposed development footprint. However, the ruderal grasslands within the open space provide ostensibly suitable nesting, foraging, and roosting habitat for the burrowing owl.

Loggerhead Shrike (*Lanius ludovicianus*). Federal Listing Status: None; State Listing Status: Species of Special Concern (Nesting). The loggerhead shrike is a predatory songbird associated with open habitats interspersed with shrubs, trees, poles, fences, or other perches from which it can hunt (Yosef 1996). Nests are built in densely foliated shrubs or trees, often containing thorns, which offer protection from predators and upon which prey items are impaled. The breeding season for loggerhead shrikes may begin as early as mid-February and lasts through July (Yosef 1996). Nationwide, loggerhead shrike populations have declined significantly over the last 20 years. Loggerhead shrikes are still fairly common in parts of the San Francisco Bay area, but urbanization has reduced available habitat, and local populations are likely declining (Cade and Woods 1997, Humple 2008).

Loggerhead shrikes nest in a number of locations in the Project region where open grassland, ruderal, or agricultural habitat with scattered brush, chaparral, or trees that provide perches and nesting sites occurs (Bousman 2007c). This species occurs slightly more widely (i.e., in smaller patches of open areas providing foraging habitat) during the nonbreeding season. Suitable nesting habitat is present adjacent to the study area and the species likely forages in the grasslands on the site.

Yellow Warbler (*Setophaga petechia*). Federal Listing Status: None; State Listing Status: Species of Special Concern (Nesting). The yellow warbler is a widespread neotropical migrant that inhabits wet deciduous forests throughout North America (Lowther et al. 1999). In California, yellow warblers occupy wooded riparian habitats along the coast, on both eastern and western slopes of the Sierra Nevada up to approximately 1700 ft, and throughout the northern portion of the state (Heath 2008). Their range has remained relatively stable over time, but populations have declined substantially (Lowther et al. 1999, Cain et al. 2003, Heath 2008). Yellow warblers nest from early May through early August and construct open cup nests in upright forks of shrubs or trees in dense willow thickets or other dense vegetation (Lowther et al. 1999).

Yellow warblers are uncommon breeders in the Project region due to loss of riparian habitat, invasion by non-native plants, development along riparian corridors, and the abundance of the brown-headed cowbird (*Molothrus ater*) in the San José area. However, small numbers of yellow warblers still nest in remnant riparian areas within Santa Clara County (Bousman 2007d). Suitable nesting habitat consists of riparian corridors, often with an overstory of mature cottonwoods and sycamores, a midstory of box elder and willow, and a substantial shrub understory (Bousman 2007d). Riparian areas with reduced understory due to grazing or disturbance are generally not used by this species, and riparian corridors lacking open ruderal or herbaceous vegetation along the edges of the corridors or with development up to the corridor edge are often avoided as well. Suitable riparian nesting habitat is not present on or immediately adjacent to the study area. However, the species may occur on the site as a migrant. Because this species is only a species of special concern while nesting, individuals occurring in the study area during migration would not be considered special status.

San Francisco Common Yellowthroat (*Geothlypis trichas sinuosa*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The San Francisco common yellowthroat inhabits emergent vegetation and nests in fresh and brackish marshes and moist floodplain vegetation around the San Francisco Bay. Common yellowthroats will use small and isolated patches of habitat as long as groundwater is close enough to the surface to encourage the establishment of dense stands of rushes (*Scirpus* and *Juncus* spp.), cattails, willows, and other emergent vegetation (Nur et al. 1997, Gardali and Evens 2008). Ideal habitat, however, is comprised of extensive, thick riparian, marsh, or herbaceous floodplain vegetation in perpetually moist areas, where populations of brown-headed cowbirds are low (Menges 1998). San Francisco common yellowthroats nest primarily in fresh and brackish marshes, although they nest in salt marsh habitats that support tall vegetation (Guzy and Ritchison 1999). This subspecies builds open-cup nests low in the vegetation, and nests from mid-March through late July (Guzy and Ritchison 1999, Gardali and Evens 2008).

In the South Bay, the San Francisco common yellowthroat is a fairly common breeder in fresh and brackish marshes. It breeds commonly in the marshes along San Tomas Aquino Creek, and may occasionally forage in the easternmost portion of the study area. However, no suitable breeding habitat is present in the study area.

Alameda Song Sparrow (*Melospiza melodia pusillula*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Alameda song sparrow is one of three subspecies of song sparrows that nest only in salt marsh habitats in the San Francisco Bay area (Chan and Spautz 2008). Prime habitat for Alameda song sparrows consists of large areas of tidally influenced salt marsh dominated by cordgrass and gumplant and intersected by tidal sloughs, offering dense vegetative cover and singing perches. Although the special-status *pusillula* subspecies (the "species" of special concern) is occasionally found in brackish marshes dominated by bulrushes, it is apparently very sedentary and is not known to disperse upstream into freshwater habitats (Basham and Mewaldt 1987). While the range of the Alameda song sparrow has remained relatively unchanged over time, populations have been reduced substantially and are continually threatened by the loss and fragmentation of salt marshes around the Bay (Nur et al. 1997, Chan and Spautz 2008).

Song sparrows nest as early as March, but peak nesting activity probably occurs in May and June. Song sparrows that nest in salt marshes in the Bay area (including *pusillula*) are known to nest about two weeks earlier than the more widespread *gouldii* subspecies, which nests farther inland in freshwater habitats (Johnston 1954; Johnston 1956). This early nesting by *pusillula* is apparently an adaptation to breeding in a tidal environment, as high tides in late spring and early summer may destroy large numbers of nests.

Suitable nesting habitat for the Alameda song sparrow is not present in the study area. However, song sparrows breed commonly in the marshes along San Tomas Aquino Creek, and may occasionally forage in the easternmost portion of the study area. Song sparrows in this location may be intergrades between the *pusillula* subspecies typically found in tidal marsh habitats and the *gouldii* subspecies typically found in upland habitats (San Francisco Bay Bird Observatory 2012).

Bryant's Savannah Sparrow (*Passerculus sandwichensis alaudinus*). Federal status: None; State status: Species of Special Concern. Bryant's savannah sparrow is one of four subspecies of savannah sparrow that breed in California. The *alaudinus* subspecies occurs primarily in coastal and bayshore areas, from Humboldt Bay to Morro Bay, and is found year-round in low-elevation, tidally influenced habitat, specifically pickleweed-dominated salt marshes, and in grasslands and ruderal areas. Along the edge of the Bay, levee tops with short vegetative growth and levee banks with high pickleweed are the preferred nesting habitat of this sparrow (Fitton 2008). Suitable pickleweed dominated salt marsh habitat is not present in the study area. However, small numbers of this subspecies may forage in the study area during the nonbreeding season.

Pallid Bat (*Antrozous pallidus*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The pallid bat is a light brown or sandy-colored, long-eared, moderate-sized bat that occurs throughout California with the exception of the northwest corner of the state and the high Sierra Nevada (Zeiner et al. 1990b). Pallid bats are most commonly found in oak savannah and in open dry habitats with rocky areas, trees, buildings, or bridge structures that are used for roosting (Zeiner et al. 1990b, Ferguson and Azerrad 2004). Coastal colonies commonly roost in deep crevices in rocky outcroppings, in buildings, under bridges, and in the crevices, hollows, and exfoliating bark of trees. Night roosts often occur in open buildings, porches, garages, highway bridges, and mines. Colonies can range in size from a few individuals to over a hundred (Barbour and Davis 1969), and usually consist of at least 20 individuals (Wilson and Ruff 1999). Pallid bats typically winter in canyon bottoms and riparian areas. After mating during the late fall and winter, females leave to form maternity colonies, often on ridge tops or other warmer locales (Johnston et al. 2006). Pallid bat roosts are very susceptible to human disturbance, and urban development has been cited as the most significant factor contributing to their regional decline (Miner and Stokes 2005).

Pallid bats were likely present throughout the South Bay historically, but they are slowly being extirpated from the area due to anthropogenic disturbance and habitat loss. No trees with suitably large cavities to provide roosting habitat for pallid bats are present in the study area. Further, pallid bats have been extirpated from highly urbanized areas close to the Bay in the region, and thus this species is not expected to roost in the Project vicinity. However, individuals from more remote roosts could potentially forage in the study area over open habitats on rare occasions.

American Peregrine Falcon (*Falco peregrinus anatum*). Federal Listing Status: None; State Listing Status: Fully Protected. The American peregrine falcon occurs throughout much of the world, and is known as one of the fastest flying birds of prey. Peregrine falcons prey almost entirely on birds, which they kill while in flight. These falcons nest on ledges and caves on steep cliffs, as well as on human-made structures such as buildings, bridges, and electrical transmission towers. In California, they are known to nest along the entire coastline, the northern Coast, and the Cascade Ranges and Sierra Nevada.

A severe decline in populations of the widespread North American subspecies *anatum* began in the late 1940s. This decline was attributed to the accumulation of DDE, a metabolite of the organochlorine pesticide DDT, in aquatic food chains. When concentrated in the bodies of predatory birds such as the peregrine falcon, this

contaminant led to reproductive effects, such as the thinning of eggshells. The American peregrine falcon was listed as endangered by the USFWS in 1970 (USFWS 1970) and by the State of California in 1971. Recovery efforts included the banning of DDT in North America, and captive breeding programs to help bolster populations. The USFWS removed the American peregrine falcon from the endangered Species List in 1999 (USFWS 1999), and from the state endangered species list in 2009.

The only locations within the Project vicinity where peregrines have been detected nesting are in old raven (*Corvus corax*) and hawk nests on electrical transmission towers within managed ponds in the Mountain View/Alviso area. The species is not known or expected to nest in the immediate Project area. However, peregrines nesting elsewhere in the South Bay, as well as migrants and wintering birds, forage occasionally in the study area.

Golden Eagle (*Aquila chrysaetos*). Federal Listing Status: None; State Listing Status: Fully Protected. In California, the golden eagle is an uncommon permanent resident and migrant throughout the state. The species' breeding range within California excludes only the Central Valley, the immediate coast in the far north, and the southeastern corner of the state (Zeiner et al. 1990a). Recent declines of golden eagle populations have occurred in several western states in North America, including California, primarily because of loss of habitat and mortalities resulting from human activities (Kochert et al. 2002, Good et al. 2007). Further declines in eagle populations are expected to occur as long as habitat loss and anthropogenic landscape alteration continue (Good et al. 2007).

The golden eagle nests in a range of open habitats, including desert scrub, foothill cismontane woodlands, and annual or perennial grasslands (Zeiner et al. 1990a, Kochert et al. 2002). Golden eagle nesting habitat is characterized by large, remote patches of grassland or open woodland; a hilly topography that generates lift; an abundance of small mammal prey; and tall structures that serve as nest platforms and hunting perches (Kochert et al. 2002). Once a breeding pair establishes a territory, they may build a number of nests in tall structures such as tall trees or snags, cliffs, or utility towers (Zeiner et al. 1990a, Kochert et al. 2002), only one of which is used in any given year (Kochert et al. 2002). The eagle breeding season begins in late January and continues through August (CDFG 2008). Following the nesting period, adult eagles usually remain in or near their breeding territory (Zeiner et al. 1990a). Young birds in California tend to be sedentary, remaining in or near their parental home ranges (Kochert et al. 2002).

In the South Bay, golden eagles nest widely in the Diablo Range and less commonly in the Santa Cruz Mountains (Bousman 2007e), outside the Project area. No suitable nesting habitat for golden eagles occurs within or adjacent to the study area. Suitable foraging habitat for golden eagles occurs on the Project site, and nonbreeding eagles may forage there on occasion. However, this species occurs very infrequently around the immediate edge of the baylands in the South Bay, and based on the infrequency with which it has been reported in this heavily birded area by birders, it is expected to forage in open habitats within and adjacent to the study area only on rare occasions.

White-tailed Kite (*Elanus leucurus*). Federal Listing Status: None; State Listing Status: Fully Protected. In California, white-tailed kites can be found in the Central Valley and along the coast, in grasslands, agricultural fields, cismontane woodlands, and other open habitats (Zeiner et al. 1990a, Dunk 1995, Erichsen et al. 1996). White-tailed kites are year-round residents of the state, establishing nesting territories that encompass open areas with healthy prey populations, and snags, shrubs, trees, or other nesting substrates (Dunk 1995). Nonbreeding birds typically remain in the same area over the winter, although some movements do occur (Polite 1990). The presence of white-tailed kites is closely tied to the presence of prey species, particularly voles, and prey base may be the most important factor in determining habitat quality for white-tailed kites (Dunk and Cooper 1994, Skonieczny and Dunk 1997). Although the species recovered after population declines during the early 20th century, its populations may be exhibiting new declines as a result of recent increases in habitat loss and disturbance (Dunk 1995, Erichsen et al. 1996).

In the Project vicinity, white-tailed kites are known to nest along the northern edge of Santa Clara County throughout the open areas edging the San Francisco Bay (Bousman 2007f). Suitable breeding habitat is not present in the study area. However, the species may forage on the site.