

Appendix C



LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

CALIFORNIA CIRCLE-PHASE I BIOLOGICAL EVALUATION MILPITAS, SANTA CLARA COUNTY, CALIFORNIA

Prepared by

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PN 1640-01

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1.0 INTRODUCTION

Live Oak Associates, Inc. (LOA), has prepared the following report, which describes the biotic resources of the approximately 10.6-acre (approximately 7.4 acres not including creek easement) California Circle-Phase I project in the city of Milpitas, California (APNs 022-37-011 and 022-37-012). The site is bounded by California Circle to the west, Lower Penitencia Creek to the east, and commercial development to the south (Figure 1).

The proposed project is the redevelopment of the site with an 84-home single-family detached neighborhood with parks with pedestrian access to the current trail along Lower Penitencia Creek, and a clear span, 10-foot wide pedestrian bridge crossing Lower Penitencia Creek. The bridge will be constructed toward the southern edge of the proposed neighborhood, approximately halfway between the current creek crossings with concrete landings on the levy which will be designed to improve the integrity of the levy. Redevelopment of the site will include demolition of all onsite buildings and asphalt, removal of onsite trees within the currently developed area, but reserving most onsite street trees within 20 feet of the California Circle roadway. Trees on the western slope of the levy along the creek will not be impacted by new development and may or may not remain depending on the Army Corps of Engineers' review. The pedestrian bridge will be constructed off-site and put in place with a crane. The bridge is proposed as a clear span structure that will be placed on top of the levies on either side of Lower Penitencia Creek and, therefore, will not have any footings, cantilevers, or other supports within the creek or between the banks.

This report evaluates potential impacts to biological resources resulting from the proposed project described above. The project site is located in the Milpitas 7.5" U.S. Geological Survey (USGS) quadrangle within Section 36 of Township 5 South, Range 1 West.

Site development can damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, these projects may be regulated by state or federal agencies, subject to provisions of the California Environmental Quality Act (CEQA), and/or covered by policies and ordinances of the City of Milpitas. This report addresses issues related to: 1) sensitive biotic

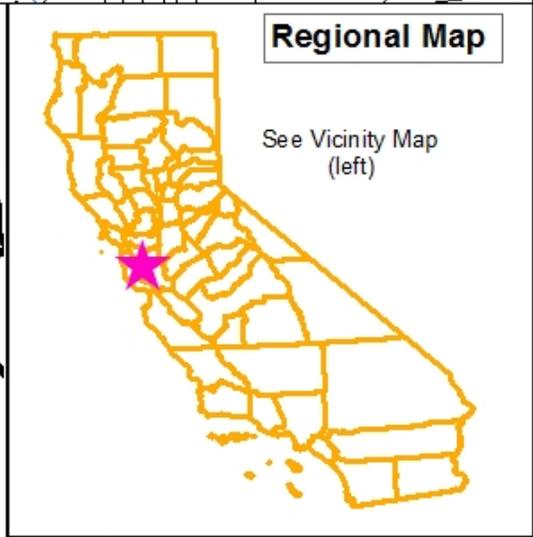
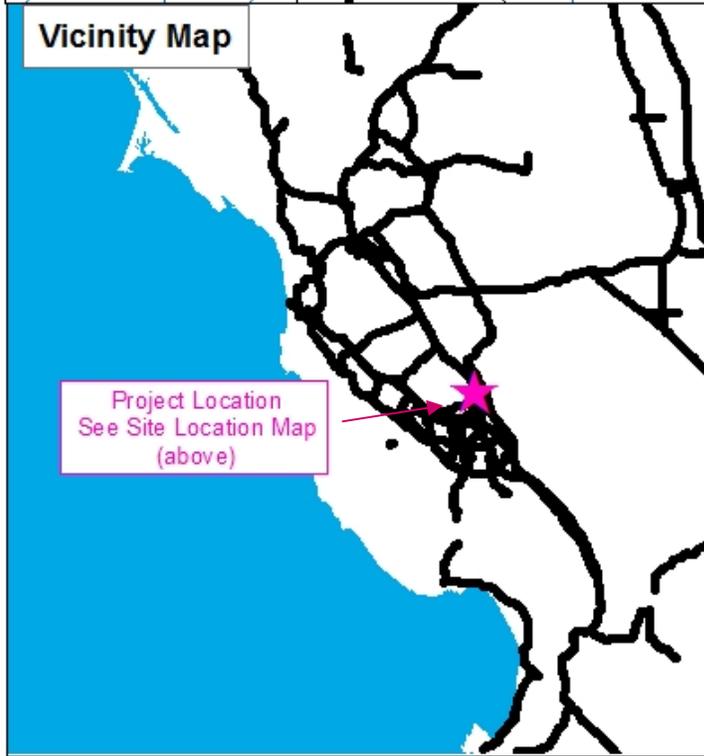
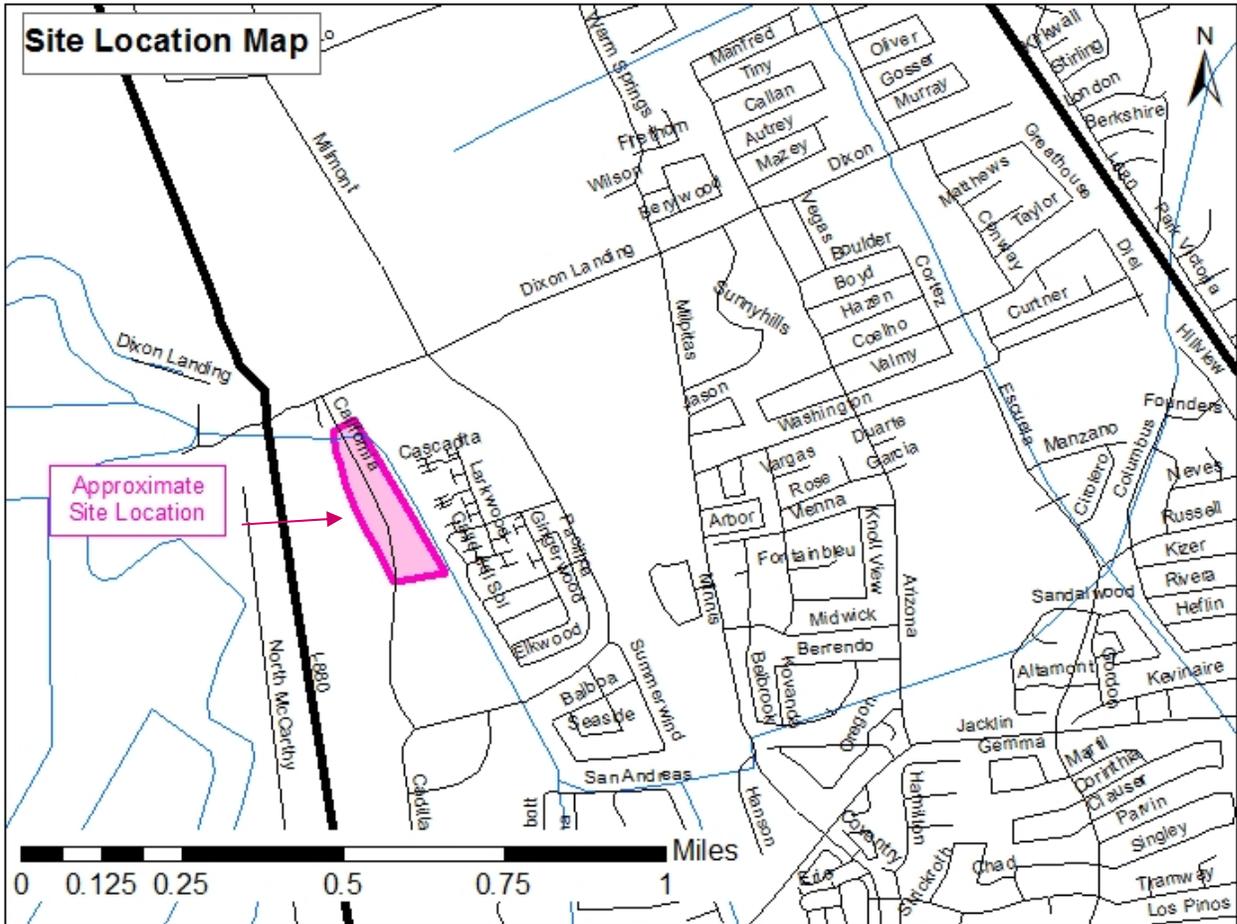
resources occurring on the site; 2) the federal, state, and local laws regulating such resources, and 3) mitigation measures which may be required based on potential impacts. As such, the objectives of this report are to:

- Summarize all site-specific information related to existing biological resources;
- Make reasonable inferences about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species' known range;
- Summarize all state and federal natural resource protection laws that may be relevant to possible future site development;
- Identify and discuss project impacts to biological resources likely to occur on the site within the context of CEQA or any state or federal laws; and
- Identify avoidance and mitigation measures that would reduce impacts to a less-than-significant level as identified by CEQA and that are generally consistent with recommendations of the resource agencies for affected biological resources.

The analysis of impacts, as discussed in Section 3.0 of this report, is based on the known and potential biotic resources of the site, discussed in Section 2.0. Sources of information used in the preparation of this analysis included: 1) the *California Natural Diversity Data Base* (CDFG 2012), 2) the *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2012), and 3) manuals and references related to plants and animals of Santa Clara County.

Reconnaissance-level field surveys of the study area were conducted on May 15, 2012 by LOA plant and wetland ecologist Pam Peterson and May 16, 2012 by LOA ecologist Katrina Krakow, at which time the principal biotic habitats and land uses of the parcels were identified, and the constituent plants and animals were noted.

Focused surveys for sensitive plant and animal species were not conducted as part of this study. The level of investigation was sufficient to locate and establish the general extent of potentially suitable habitat present onsite for such species and the presence or absence of burrowing owls within the study area, but it was not sufficient to establish the presence or absence of other special status species unless incidentally sighted during the general survey.



Live Oak Associates, Inc.

**California Circle Phase 1
Vicinity**

Date 6/4/2012	Project # 1640-01	Figure # 1
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1.1 PROJECT DESCRIPTION

The proposed project is the redevelopment of the site with an 84-home single-family detached neighborhood with parks with pedestrian access to the current trail along Lower Penitencia Creek, and a clear span, 10-foot wide pedestrian bridge crossing Lower Penitencia Creek. The bridge will be constructed toward the southern edge of the proposed neighborhood, approximately halfway between the current creek crossings with concrete landings on the levy which will be designed to improve the integrity of the levy. Redevelopment of the site will include demolition of all onsite buildings and asphalt, removal of onsite trees within the currently developed area, but reserving most onsite street trees within 20 feet of the California Circle roadway. Trees on the western slope of the levy along the creek will not be impacted by new development and may or may not remain depending on the Army Corps of Engineers' review. The pedestrian bridge will be constructed off-site and put in place with a crane. The bridge is proposed as a clear span structure that will be placed on top of the levies on either side of Lower Penitencia Creek and, therefore, will not have any footings, cantilevers, or other supports within the creek or between the banks.

2.0 EXISTING CONDITIONS

The study area is located in the City of Milpitas in Santa Clara County, California. The California Circle-Phase I project site is bordered by California Circle to the west, Lower Penitencia Creek to the east, and commercial development to the south.

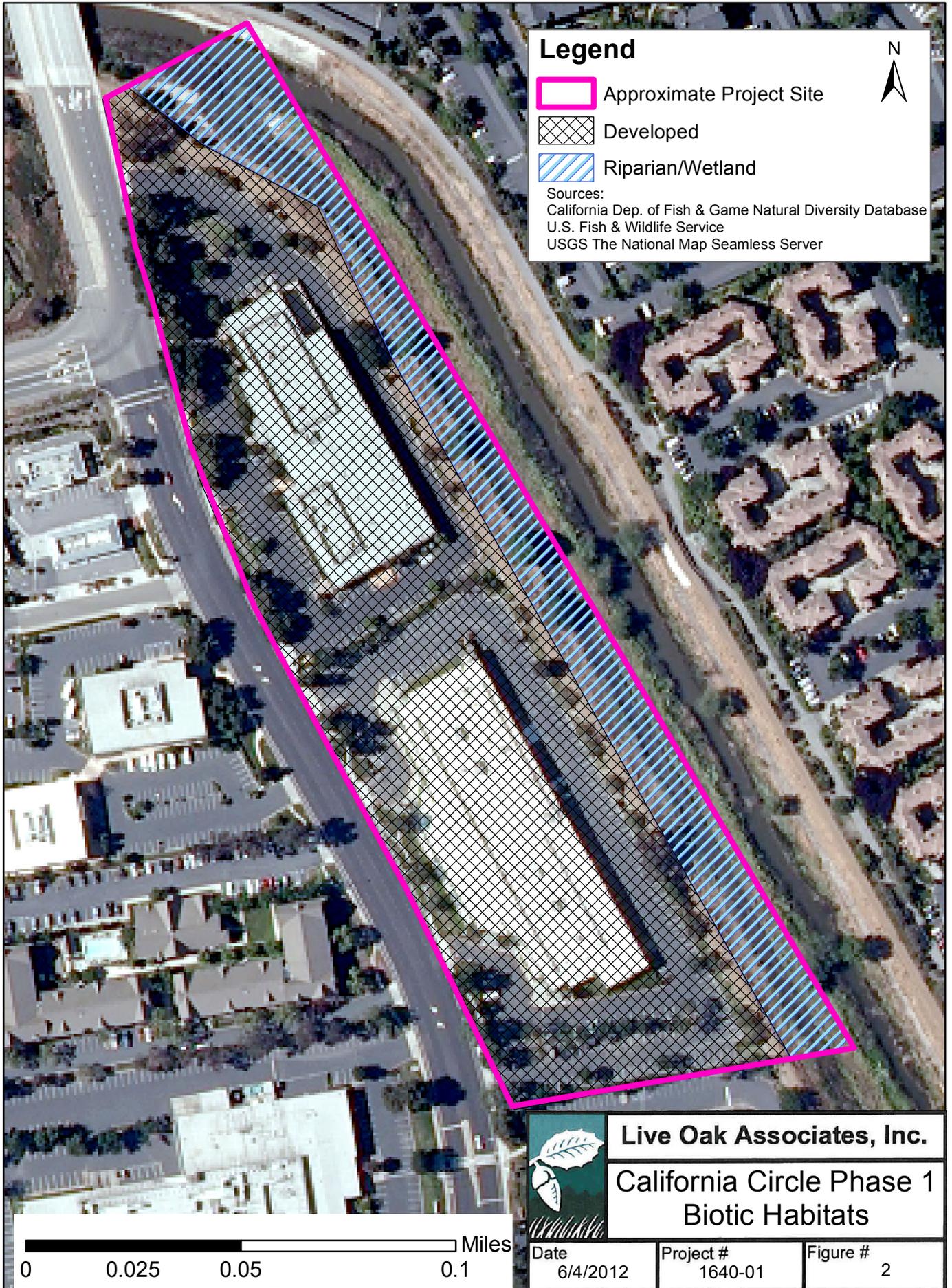
Surrounding land uses primarily consist of commercial development to the west and high density residential development to the east with Dixon Landing Park in the vicinity to the east. The study area itself consists of a developed area with riparian/wetland habitat to the east of the development footprint in the form of Lower Penitencia Creek. Topographically, the study area is flat, ranging in elevation from approximately 5 feet (1.5 m) to approximately 10 feet (3 m) National Geodetic Vertical Datum (NGVD).

One soil type—Urbanland-Campbell Complex, 0 to 2 percent slopes, protected—was identified on the project site (NRCS 2012). This soil type is moderately well-drained and is protected from flooding. It is not considered hydric, although hydric inclusions may occur. Serpentine soils, a soil type known to support several endemic special status plant species in the project vicinity, are absent from the site.

Annual precipitation in the general vicinity of the study area averages 20 inches, almost 95% of which falls between November and April. Virtually all precipitation falls in the form of rain. Stormwater runoff flows off the pavement of the site and infiltrates the soils at the edges of the pavement.

2.1 BIOTIC HABITATS / LAND USES

The study area supports two biotic habitats that provide some biological habitat value for certain species. For the purposes of this report, the biotic habitats of the site are listed as “Developed” and “Riparian/Wetland” (Figure 2). These are discussed in greater detail below. A list of animal species observed and expected to occur on the site is provided in Appendix A.

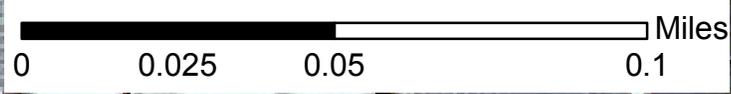


Legend

-  Approximate Project Site
-  Developed
-  Riparian/Wetland



Sources:
 California Dep. of Fish & Game Natural Diversity Database
 U.S. Fish & Wildlife Service
 USGS The National Map Seamless Server



Live Oak Associates, Inc.
 California Circle Phase 1
 Biotic Habitats

Date 6/4/2012	Project # 1640-01	Figure # 2
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2.1.1 Developed

The developed area of the site is the largest habitat type onsite. This habitat type has two large commercial buildings and large parking lot areas which create a non-porous surface from which rainwater would flow to the margins of the asphalt.

Vegetation within this habitat type consists primarily of ornamental landscape groundcovers, shrubs and trees. Some of the more common landscape trees observed within the developed areas of the site included, but were not limited to, raywood ash (*Fraxinus angustifolia*), blackwood acacia (*Acacia melanoxylon*), silver dollar eucalyptus (*Eucalyptus cordata*), Chinese pistache (*Pistacia chinensis*) and Peruvian pepper (*Schinus molle*); while common landscape shrubs and groundcovers included Indian hawthorne (*Raphiolepis indica*), hebe (*Hebe* sp.), oleander (*Nerium oleander*), lily of the Nile (*Agapanthus walshii*), heavenly bamboo (*Nandina domestica*), African daisy (*Dimorphotheca aurantiaca*) and star jasmine (*Trachelospermum jasminoides*).

Developed lands provide limited habitat for locally occurring wildlife species; however, species using the riparian corridor of Lower Penitencia Creek may use the area of the site from time to time. The density of developed lands on the site and in the vicinity would reduce the value of the foraging habitat for wildlife and would preclude some of the species that would occur in more natural areas in the site's vicinity from utilizing these areas for breeding habitat.

No amphibians were observed in this habitat type, however, the Pacific treefrog (*Hyla regilla*) is likely to occur within this habitat.

Avian species observed within developed areas of the site during the May 2012 site visits include American white pelicans (*Pelecanus erythrorhynchos*) flying over the site; great egret (*Ardea alba*); turkey vulture (*Cathartes aura*); unidentified gulls, a young red-shouldered hawk (*Buteo lineatus*) which was observed perched in an onsite tree, although no stick nests were observed on the site; Nuttall's woodpecker (*Picoides nuttallii*); western scrub jay (*Aphelocoma californica*); American crow (*Corvus brachyrhynchos*); American robin (*Turdus migratorius*); northern

mockingbird (*Mimus polyglottos*); European starling (*Sturnus vulgaris*); California towhee (*Melospiza crissalis*); house finch (*Carpodacus mexicanus*); and house sparrow (*Passer domesticus*).

The only mammal observed in this habitat type is the eastern fox squirrel (*Sciurus niger*). Other animal species that may utilize the developed lands incidentally for forage and cover include species observed or expected to occur on the adjacent riparian/wetland habitat type. The buildings onsite do not support suitable bat habitat due to the lack of openings for bats to access the interior spaces.

2.1.2 Riparian/Wetland

The area of Riparian/Wetland habitat exists alongside Lower Penitencia Creek to the east of the site. A graveled walking trail and channel maintenance access road separates this habitat type from the developed habitat type. This reach of Lower Penitencia Creek has been altered and now flows in an engineered channel which is more than 200 feet wide, consisting of two low flow channels separated by a center raised area which probably is inundated during high flow events. The only development proposed to occur within/over this habitat is a clear span bridge that will link the existing pedestrian trail on the west side of the channel from the southeast corner of the project site to a similar existing pedestrian trail along the eastern bank of the channel. During the May 2012 site visit, both low flow channels were inundated at a depth estimated at 3 to 4 feet, while the elevated area in the central portion of the creek was dry.

Vegetation observed along the east and west banks of the creek consisted primarily of dense cover by non-native annual grasses and forbs of European origin, with the most dominant species being fat wild oats (*Avena fatua*). Other grass and forb species observed on the banks included slender wild oats (*Avena barbata*), ripgut (*Bromus diandrus*), wild radish (*Raphanus sativus*), prickly lettuce (*Lactuca serriola*), bristly ox-tongue (*Picris echioides*), Italian thistle (*Carduus pycnocephalus*), cheeseweed (*Malva parviflora*), and blue salsify (*Tragopogon porrifolius*). Native vegetation along the banks was limited to a few species including riparian trees such as

Fremont's cottonwood (*Populus fremontii*) and arroyo willow (*Salix lasiolepis*); and shrubs including sagebrush (*Artemisia californica*) and common bedstraw (*Galium aparine*).

Dense wetland vegetation was present within both of the low flow channels. Wetland species observed in these areas along with their USFWS wetland indicator (2012) included common tule (*Schoenoplectus acutus* var. *occidentalis*)(OBL) and cattails (*Typha* sp.)(OBL), which were dominant throughout the channels, as well as broad-leaved pepper-weed (*Lepidium latifolium*)(FAC), fringed willow-herb (*Epilobium ciliatum*)(FACW), horsetails (*Equisetum* sp.)(FAC-FACW), mugwort (*Artemisia douglasiana*)(FAC), curly dock (*Rumex crispus*)(FAC), poison hemlock (*Conium maculatum*)(FACW) and California blackberry (*Rubus ursinus*)(FACU).

Vegetation occurring on the elevated area between the two low flow channels was dominated by poison hemlock and broad-leaved pepper-weed.

No amphibians were observed in this habitat type, however, the California newt (*Taricha torosa*), California slender salamander (*Batrachoseps attenuatus*), and Pacific treefrog are likely to occur within this habitat. No reptile species were observed in this habitat; however, the western fence lizard (*Sceloporus occidentalis*), terrestrial garter snake (*Thamnophis elegans*), gopher snake (*Pituophis catenifer*), and California kingsnake (*Lampropeltis getula californiae*) are likely to occur on the site.

Avian species observed in this habitat during the May 2012 site visit include the double-crested cormorant (*Phalacrocorax auritus*), snowy egret (*Egretta thula*), great blue heron (*Ardea herodias*), Canada goose (*Branta canadensis*) with young, mallard (*Anas platyrhynchos*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), American crow, northern mockingbird, European starling, red-winged blackbird (*Agelaius phoeniceus*), Brewer's blackbird (*Euphagus cyanocephalus*), and house sparrow. The cliff swallow (*Petrochelidon pyrrhonota*) and song sparrow (*Melospiza melodia*) were observed in the vicinity of the site within this habitat type. Avian species occurring in the developed habitat would be expected to occur in this habitat type as well.

A dead river otter (*Lontra canadensis*) was observed on the manmade island between the channels of the creek; this is a rare occurrence and is south of the current known range of the river otter in the Bay Area. Other mammalian species expected to occur within this habitat type may include the Virginia opossum (*Didelphis virginiana*), Botta's pocket gopher (*Thomomys bottae*), eastern fox squirrel, raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), domestic dog (*Canis familiaris*), and domestic cat (*Felis catus*).

2.2 MOVEMENT CORRIDORS

Many terrestrial animals need more than one biotic habitat to perform all of their biological activities. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages, or movement corridors, for animals to be able to access locations containing different biotic resources that are essential to maintaining their life cycles. Terrestrial animals use ridges, canyons, riparian areas, and open spaces to travel between their required habitats.

The importance of an area as a movement corridor depends on the species in question and its consistent use patterns. Animal movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

While no detailed study of animal movements has been conducted for the study area, knowledge of the site, its habitats, and the ecology of the species potentially occurring onsite permits sufficient predictions about the types of movements occurring in the region and whether or not proposed development would constitute a significant impact to animal movements.

Lands surrounding the site have been developed and do not offer movement corridors. The only movement corridor of value within the direct vicinity of the project is Lower Penitencia Creek as all other potential movement corridors have been blocked by development and major and minor roads. As the site proposed for development is already developed and the 10-foot wide clear span pedestrian bridge will not impact the creek or its banks, redevelopment of the site is not expected to restrain the movement of wildlife between the site and higher quality habitat of Lower Penitencia Creek.

2.3 SPECIAL STATUS PLANTS AND ANIMALS

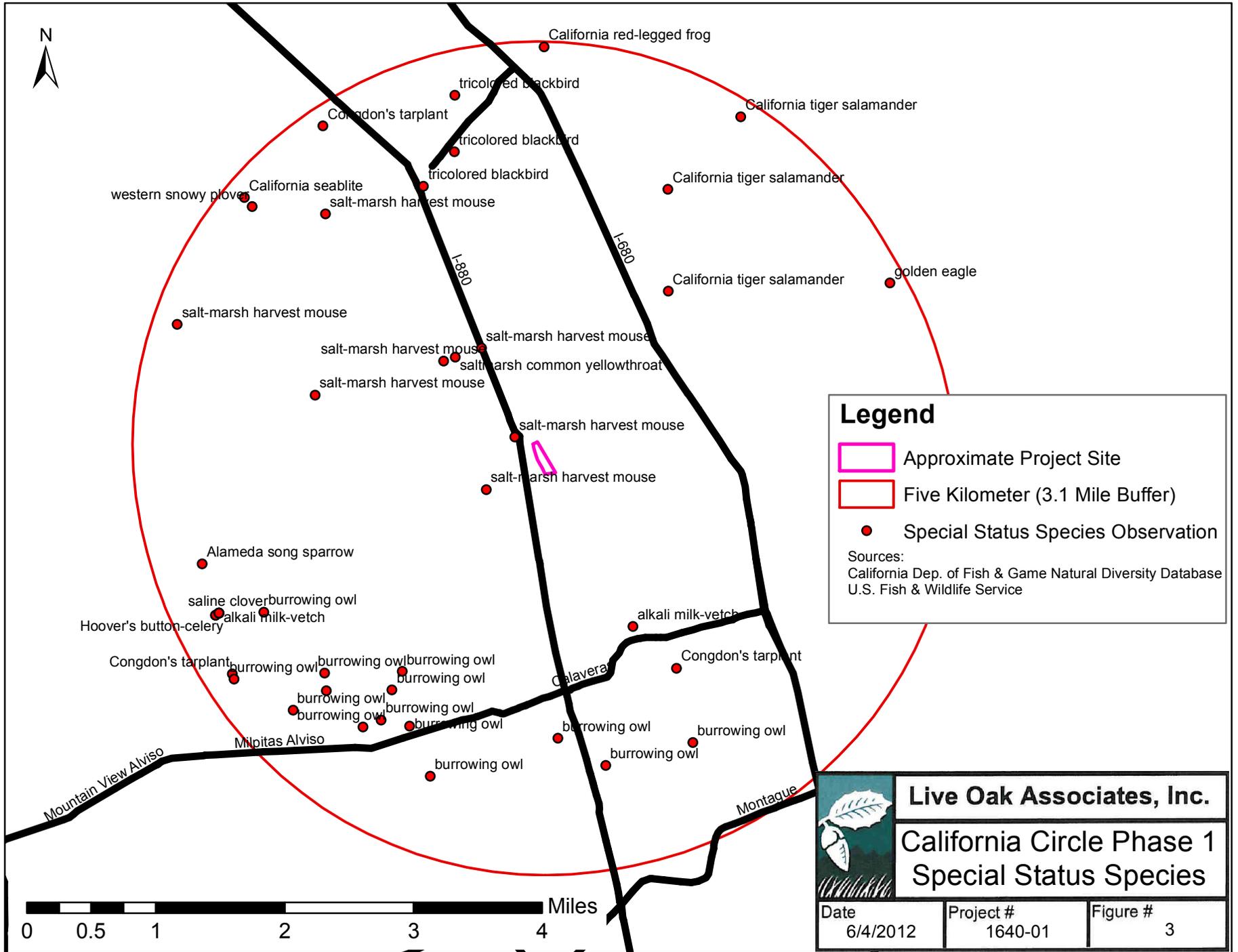
Several species of plants and animals within the state of California have low populations and/or limited distributions. Such species may be considered “rare” and are vulnerable to extirpation as the state’s human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2, state and federal laws have provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as “threatened” or “endangered” under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as “species of special concern” by the CDFG. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2012). Collectively, these plants and animals are referred to as “special status species.”

A number of special status plants and animals occur in the vicinity of the site (Figure 3). These species and their potential to occur on the site are listed in Table 2 on the following pages. Sources of information for this table included *California’s Wildlife, Volumes I, II, and III* (Zeiner et. al 1988), *California Natural Diversity Data Base* (CDFG 2012), *Endangered and Threatened Wildlife and Plants* (USFWS 2012), *State and Federally Listed Endangered and Threatened Animals of California* (CDFG 2012), and *The California Native Plant Society’s Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2012). This information was used

to evaluate the potential for special status plant and animal species to occur on the site. Figure 3 depicts the location of special status species found by the California Natural Diversity Data Base (CNDDDB). It is important to note that the CNDDDB is a volunteer database; therefore, it may not contain all known records.

A search of published accounts for all relevant special status plant and animal species was conducted for the Milpitas USGS 7.5" quadrangle in which the project site occurs and for the eight surrounding quadrangles (Newark, Niles, La Costa Valley, Mountain View, Calaveras Reservoir, Cupertino, San Jose West, and San Jose East) using the California Natural Diversity Data Base Rarefind (CDFG 2012). All species listed as occurring in these quadrangles on CNPS Lists 1A, 1B, 2, 3, or 4 were also reviewed.

Serpentine soils are absent from the site; as such, those species that are uniquely adapted to serpentine conditions are considered absent from the site. These latter species include the big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), Mt. Hamilton fountain thistle (*Cirsium fontinale* var. *campylon*), San Francisco collinsia (*Collinsia multicolor*), Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*), fragrant fritillary (*Fritillaria liliacea*), Loma Prieta hoita (*Hoita strobilina*), woodland woollythreads (*Monolopia gracilens*), Metcalf Canyon jewel-flower (*Streptanthus albidus* ssp. *albidus*), and most beautiful jewel-flower (*Streptanthus albidus* ssp. *peramoenus*). Other plant species occur in habitats not present in the study area (e.g., chaparral, broadleaved forest, coastal prairie, coastal scrub, etc.) or at elevations significantly below or above onsite elevations (i.e. below or above 5 to 10 feet or 1.5 to 3 meters in elevation); therefore, they are also considered absent from the site. These latter species include the San Joaquin spearscale (*Atriplex joaquiniana*), Anderson's manzanita (*Arctostaphylos andersonii*), Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*), Ben Lomond buckwheat (*Eriogonum nudum* var. *decurrens*), Indian Valley bush-mallow (*Malacothamnus aboriginum*), arcuate bush-mallow (*Malacothamnus arcuatus*), and Hall's bush-mallow (*Malacothamnus hallii*).



Legend

- Approximate Project Site
- Five Kilometer (3.1 Mile Buffer)
- Special Status Species Observation

Sources:
 California Dep. of Fish & Game Natural Diversity Database
 U.S. Fish & Wildlife Service

	Live Oak Associates, Inc.	
	California Circle Phase 1 Special Status Species	
Date	Project #	Figure #
6/4/2012	1640-01	3



TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFG 2012 and CNPS 2012)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

<i>Species</i>	<i>Status</i>	<i>Habitat</i>	<i>*Occurrence in the Study Area</i>
Robust spineflower (<i>Chorizanthe robusta</i> var. <i>robusta</i>)	FE, CNPS 1B	<u>Habitat</u> : Occurs on sandy or gravelly soils in openings of cismontane woodlands, coastal dunes and coastal scrub. <u>Elevation</u> : 3- 300 meters. <u>Blooms</u> : Annual herb; April – September.	Absent. Habitat is absent from the site for this species.
Contra Costa goldfields (<i>Lasthenia conjugens</i>)	FE	<u>Habitat</u> : Occurs in vernal pools and mesic areas of valley and foothill grasslands, typically alkaline. <u>Elevation</u> : 0-470 meters. <u>Blooms</u> : Annual herb; March-June.	Absent. Habitat is absent from the site for this species.
California seablite (<i>Suaeda californica</i>)	FE, CNPS 1B	<u>Habitat</u> : Occurs in coastal salt marshes and swamps. <u>Elevation</u> : 0-15 meters. <u>Blooms</u> : Evergreen shrub; July-October	Absent. Habitat is absent from the site for this species.

Other special status plants listed by CNPS

<i>Species</i>	<i>Status</i>	<i>Habitat</i>	<i>*Occurrence in the Study Area</i>
Alkali milk-vetch (<i>Astragalus tener</i> var. <i>tener</i>)	CNPS 1B	<u>Habitat</u> : Occurs in alkaline soils in valley and foothill grassland and in vernal pools. <u>Elevation</u> : 1 - 60 meters. <u>Blooms</u> : Annual herb; March-June.	Absent. Habitat is absent from the site for this species.
Brittlescale (<i>Atriplex depressa</i>)	CRPR 1B.2	<u>Habitat</u> : Occurs on alkaline clay soils in chenopod scrub, meadows and seeps, playas, valley and foothill grasslands, and vernal pools. <u>Elevation</u> : 1-320 meters. <u>Blooms</u> : Annual herb; April-October.	Absent. Habitat is absent from the site for this species.
Lesser saltscale (<i>Atriplex minuscula</i>)	CRPR 1B.1	<u>Habitat</u> : Occurs in alkaline and sandy soils in chenopod scrub, playas, and valley and foothill grasslands. <u>Elevation</u> : 15-200 meters. <u>Blooms</u> : Annual herb; May-October.	Absent. Habitat is absent from the site for this species.
Round-leaved filaree (<i>California macrophylla</i>)	CNPS 1B	<u>Habitat</u> : Occurs on clay soils in cismontane woodlands and valley and foothill grasslands. <u>Elevation</u> : 15-1200 meters. <u>Blooms</u> : Annual herb; March to May.	Absent. Habitat is absent from the site for this species.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Chaparral harebell (<i>Campanula exigua</i>)	CNPS 1B	<u>Habitat</u> : Occurs in rocky chaparral, usually on serpentine soils. <u>Elevation</u> : 275-1250 meters. <u>Blooms</u> : Annual herb; May-June.	Absent. Habitat is absent from the site for this species.
Congdon's tarplant (<i>Centromadia parryi</i> ssp. <i>congonii</i>)	CNPS 1B	<u>Habitat</u> : Occurs on valley and foothill grasslands on alkaline soils. <u>Elevation</u> : 0-230 meters. <u>Blooms</u> : Annual herb; May-November.	Absent. Habitat is absent from the site for this species.
Point Reyes bird's-beak (<i>Cordylanthus maritimus</i> ssp. <i>palustris</i>)	CNPS 1B	<u>Habitat</u> : Found in coastal salt areas such as marshes and swamps. <u>Elevation</u> : 0-1900 meters. <u>Blooms</u> : Annual herb; June-October.	Absent. Habitat is absent from the site for this species.
Western leatherwood (<i>Dirca occidentalis</i>)	CNPS 1B	<u>Habitat</u> : Found in mesic habitats such as broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, north coast coniferous forest, riparian forest, and riparian woodland. <u>Elevation</u> : 30-395 meters. <u>Blooms</u> : Perennial shrub; January-April.	Absent. Riparian habitat of the site has been highly modified and is no longer suitable to support this species. Also, this species is a perennial shrub that would have been identifiable during the May site visits if present and it was not observed.
Hoover's button-celery (<i>Eryngium aristulatum</i> var. <i>hooveri</i>)	CNPS 1B	<u>Habitat</u> : Occurs in vernal pools <u>Elevation</u> : 3- 45 meters. <u>Blooms</u> : Annual/perennial herb; July.	Absent. Habitat is absent from the site for this species.
Prostrate vernal pool navarretia (<i>Navarretia prostrata</i>)	CNPS 1B	<u>Habitat</u> : Occurs in coastal scrub, meadows and seeps, valley and foothill grasslands on alkaline soils, and vernal pools on mesic soils. <u>Elevation</u> : 15 and 700 meters. <u>Blooms</u> : Annual herb; April – July.	Absent. Habitat is absent from the site for this species.
Hairless popcorn flower (<i>Plagiobothrys glaber</i>)	CNPS 1A	<u>Habitat</u> : Occurs in heavy clay soils of alkaline meadows. <u>Elevation</u> : 15 - 180 meters. <u>Blooms</u> : Annual herb; March-May.	Absent. Habitat is absent from the site for this species.
Slender-leaved pondweed (<i>Stuckenia filiformis</i>)	CNPS 2	<u>Habitat</u> : Shallow freshwater marshes and swamps. Elevation: 300 - 2150 meters. <u>Blooms</u> : Perennial herb.	Absent. While freshwater wetlands are present within the Berryessa Creek channel, the creek is well below the elevation of known occurrences of this species and does not have a hydrologic regime suitable for this species.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Saline clover (<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>)	CNPS 1B	<u>Habitat</u> : Marshes and swamps, valley and foothill grasslands on mesic or alkaline soils, and vernal pools. <u>Elevation</u> : 0-300 meters. <u>Blooms</u> : Annual herb; April–June.	Absent. Habitat is absent from the site for this species.

ANIMALS (adapted from CDFG 2012 and USFWS 2012)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Vernal pool tadpole shrimp (<i>Lepidurus packardii</i>)	FE	Occurs in vernal pools of California. Vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.	Absent. Suitable habitat for vernal pool tadpole shrimp in the form of vernal pools is absent from the study area.
Bay checkerspot butterfly (<i>Euphydryas editha bayensis</i>)	FT	Occurs in serpentine grasslands with the larval host plant <i>Plantago erecta</i> , and/or a <i>Castilleja densiflora</i> or <i>C. exserta</i> .	Absent. Serpentine soils are absent from the site, therefore, the host plants are also absent.
Steelhead - Central California Coast DPS (<i>Oncorhynchus mykiss irideus</i>)	FT	Spawn in freshwater rivers or streams in the spring and spend the remainder of their life in the ocean.	Possible. Although NOAA does not specifically list the creeks within NOAA's region of Critical Habitat for the Central California Coast ESU, the project site is within this region. Steelhead may move through this reach of Lower Penitencia Creek.
California tiger salamander (<i>Ambystoma californiense</i>)	FT, CT,	Breeds in vernal pools and stock ponds of central California. Adults aestivate in grassland habitats adjacent to the breeding sites.	Absent. There are no breeding ponds on the site or within close proximity of the site. The nearest documented occurrence of this species is approximately one and a half miles northeast of the site. This record is separated from the site by dense development and roadways.
California red-legged frog (<i>Rana draytonii</i>)	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	Unlikely. The site supports perennial water which may support potential breeding areas. However, the upland habitat is poor for the CRLF, as the upland cover is mostly grasses and developed areas with no burrows, and it is unlikely that CRLF would get washed downstream to this location. The nearest documented occurrence of the CRLF is approximately three miles to the north of the site in a separate drainage system.
California black rail (<i>Laterallus jamaicensis coturniculus</i>)	CT, CP	Occurs in coastal and freshwater marshes, estuaries, and tidal slough areas.	Absent. Very marginal habitat for the California black rail is present on the project site in the form of the riparian/wetland habitat. There are no records on the east side of I-880 in the vicinity of the project.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont’d.

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
California clapper rail (<i>Rallus longirostris obsoletus</i>)	FE, CE, CP	Occurs in tidal salt and brackish marshes of the San Francisco Bay and historically in tidal estuaries from Marin to San Luis Obispo Counties, CA.	Absent. Habitat in the form of tidal and brackish salt marshes are absent from this reach of Lower Penitencia Creek, and vegetation present is not indicative of brackish water. The nearest reported occurrence is more than three miles from the site.
Bank swallow (nesting) (<i>Riparia riparia</i>)	CT	Occurs in open areas near flowing water, nests in steep banks along inland water or coast. State-wide.	Absent. Cliffs are absent from the region of the site and the closest occurrence of bank swallows is more than 3 miles from the site.
Western snowy plover (nesting) (<i>Charadrius alexandrinus nivosus</i>)	FT, CSC	Uses man-made agricultural wastewater ponds and reservoir margins. Breeds on barren to sparsely vegetated ground at alkaline or saline lakes, reservoirs, ponds, and riverine sand bar.	Absent. Breeding habitat for this species is absent from the study area. None have been observed foraging on the east side of I-880 in the vicinity of the project. The nearest reported occurrence is approximately three miles to the northwest of the site.
California least tern (<i>Sterna antillarum browni</i>)	FE, CE, CP	Occurs in central to southern California April to November. Found in and near coastal habitat including coasts, beaches, bays, estuaries, lagoons, lakes, and rivers.	Possible. An unidentified tern was observed in the site vicinity while driving to the site. The site is at the northern range of the California least tern, and the nearest recorded observance is more than three miles from the site.
Salt-marsh harvest mouse (<i>Reithrodontomys raviventris</i>)	FE, CE, CP	Occurs in the salt and brackish marshes of Corte Madera, Richmond, and South San Francisco Bay, especially those with pickleweed and saltgrass.	Absent. Habitat in the form of pickleweed in tidal or brackish salt marshes is absent from this reach of Lower Penitencia Creek, and vegetation present is not indicative of brackish water. There are four records within a mile of the site. The nearest reported occurrence (#160) is less than a quarter mile to the northwest along Highway 880 and is extirpated. The other three occurrences are approximately one-half mile to the west of the site (#116), and approximately one mile to the northwest of the site (#97 and 159). All of these occurrences were within salt marsh habitat that included pickleweed.

California Species of Special Concern and Protected Species

Species	Status	Habitat	*Occurrence in the Study Area
Foothill yellow-legged frog (<i>Rana boylei</i>)	CSC	Occurs in swiftly flowing streams and rivers with rocky substrate with open, sunny banks in forest, chaparral, and woodland habitats, and can sometimes be found in isolated pools.	Absent. Foothill yellow-legged frogs are not currently present in Penitencia Creek and there are no recorded occurrences within three miles of the project site.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont’d.

California Species of Special Concern and Protected Species

Species	Status	Habitat	*Occurrence in the Study Area
Western pond turtle (<i>Actinemys marmorata</i>)	CSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams and irrigation ditches with aquatic vegetation. Needs basking sites and sandy banks or grassy open fields for egg laying.	Possible. Habitat is present on the site for WPT, and WPT is known to inhabit portions of Penitencia Creek and may use this reach of the creek for feeding, basking, and as a movement corridor.
Alameda whipsnake (<i>Masticophis lateralis euryxanthus</i>)	FT, CT	Occurs in chaparral foothills, shrublands with scattered grass patches, rocky canyons, and watercourses. Occurs in the San Francisco Bay area including Alameda, Contra Costa, Santa Clara and San Joaquin Counties, CA.	Absent. The site lacks suitable habitat. The nearest reported observation is more than three miles from the site.
White-tailed kite (<i>Elanus leucurus</i>)	CP	Open grasslands and agricultural areas throughout central California.	Possible. The site supports suitable foraging and nesting habitat for the WTK in the form of open riparian areas along the creek and some large trees for nesting.
Golden eagle (<i>Aquila chrysaetos</i>)	CP	Typically frequents rolling foothills, mountain areas, woodland areas, sage-juniper flats, and desert habitats.	Unlikely. The site supports marginal foraging habitat for the golden eagle along the riparian areas. Breeding habitat is absent from the site. The nearest reported observance of the golden eagle is approximately three miles to the east.
American peregrine falcon (nesting) (<i>Falco peregrines anatum</i>)	CP	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	Unlikely. Although peregrine falcons are known to occur in the greater region of the study area (City Hall in San Jose has a nesting pair each year, and other peregrine nests have been observed in large transmission towers), no nests or likely nesting locations were observed in the vicinity of the site. The nearest reported observance of the American peregrine falcon is more than three miles from the site.
Northern harrier (nesting) (<i>Circus cyaneus</i>)	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	Unlikely. Although a small area of suitable foraging habitat for the northern harrier is present on the site in the form of riparian/wetland habitat, the developed nature of the site vicinity does not support suitable foraging or nesting habitat for the northern harrier. The nearest reported observance of the northern harrier is more than three miles from the site.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont’d.

California Species of Special Concern and Protected Species

Species	Status	Habitat	*Occurrence in the Study Area
Western burrowing owl (<i>Athene cunicularia</i>)	CSC	Open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. Often associated with California ground squirrels.	Possible. The site does not currently support California ground squirrel burrows or other suitable burrows that can serve as potential nests for burrowing owls. Should ground squirrels move onto the site before construction begins, suitable nest sites may occur at that time. The nearest reported BUOW records are approximately two miles to the southwest of the site. To be prudent, protocol BUOW surveys should be conducted prior to construction activities.
Saltmarsh common yellowthroat (<i>Geothlypis trichas sinuosa</i>)	CSC	Breeds in herbaceous wetlands and salt marshes of the San Francisco Bay area, can also be found in non-breeding along the California Coast. Nests in thick herbaceous vegetation up to one meter above the ground or over water	Possible. Breeding and foraging habitat for the saltmarsh common yellowthroat occurs on the site in the form of the riparian/wetland habitat. The nearest recorded occurrence is approximately one miles to the north of the site.
Alameda song sparrow (<i>Melospiza melodia pusillula</i>)	CSC	Found in tidal salt marsh habitat with exposed ground for foraging with no more than 2-5 cm between bases of plants. Current range is generally only along the San Francisco Bay.	Unlikely. Tidal salt marsh habitat is absent from the site, and only very marginal Alameda song sparrow habitat occurs on the site along the creek. They are generally found along San Francisco Bay with the nearest record approximately 3 miles to the west of the site.
Tricolored blackbird (<i>Agelaius tricolor</i>)	CSC	Breeds near fresh water, primarily emergent wetlands, with tall thickets. Forages in grassland and cropland habitats.	Possible. Suitable tricolored blackbird habitat occurs on the site in the form of the riparian/wetland habitat. The nearest record is approximately two miles to the north of the site.
Salt-marsh wandering shrew (<i>Sorex vagrans halicoetes</i>)	CSC	Found in salt marshes along the San Francisco Bay.	Absent. Habitat in the form of salt marshes are absent from this reach of Lower Penitencia Creek, and vegetation present is not indicative of brackish water. The nearest reported occurrence of salt-marsh wandering shrew is more than three miles from the site.
Pallid bat (<i>Antrozous pallidus</i>)	CSC	Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas that provide roosting opportunities.	Possible. Poor foraging habitat is present on the site, however, roosting habitat is absent from the site.
Townsend’s big-eared bat (<i>Corynorhinus townsendii</i>)	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats.	Possible. Suitable foraging habitat for this species is present on the site, however, roosting habitat is absent.
San Francisco dusky-footed woodrat (<i>Neotoma fuscipes annectens</i>)	CSC	Hardwood forests, oak riparian and shrub habitats.	Absent. No woodrat nests were observed in the denser areas of riparian habitat of the site during the May 2012 site visit.

***Explanation of Occurrence Designations and Status Codes**

Present: Species observed on the site at time of field surveys or during recent past.
Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the site, but it could occur there from time to time.
Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent: Species not observed on the site, and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CR	California Rare
FC	Federal Candidate	CP	California Protected
		CSC	California Species of Special Concern
CNPS	California Native Plant Society Listing		
1A	Plants Presumed Extinct in California	3	Plants about which we need more information – a review list
1B	Plants Rare, Threatened, or Endangered in California and elsewhere	4	Plants of limited distribution – a watch list
2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere		

2.4 ENDANGERED, THREATENED, OR SPECIAL STATUS PLANT AND ANIMAL SPECIES MERITING FURTHER DISCUSSION

Most of the special status plant and animal species listed in Table 1 may occur rarely or occasionally on the study area and sufficient information exists to evaluate the potential imposed impacts that the project may ensue. The steelhead, western pond turtle, and burrowing owl warrant further discussion. Below is a more detailed discussion on these species.

2.4.1 Steelhead Trout (*Oncorynchus mykiss*). Federal listing status: Threatened; State listing status: None

The steelhead that occur in the study site region are considered a part of the Central California Coast Evolutionarily Significant Unit (ESU). This ESU encompasses all naturally spawned steelhead populations occurring in river basins from the Russian River, located north of San Francisco Bay, down to Soquel Creek in Santa Cruz County, as well as all populations within drainages of the San Francisco and San Pablo Bays (steelhead occurring in the Sacramento-San Joaquin River Basin of the Central Valley are excluded from this ESU) (Busby, et al. 1996). The Central California Coast ESU received its listing status as Threatened under FESA on August 18, 1997.

Live history and ecology. Steelhead require adequate migration conditions both for spawning adults as well as for out-migrating smolts. Adult migration passage occurs in the study site region from winter through early spring, typically January through April, when passage may be facilitated by heavier winter flows, however, migration can begin as early as December. Adult passage can be adversely affected by manmade barriers such as dams and other within-channel structures and also as a result of flood control measures which have altered the normal hydrologic regime by reducing winter flows (Smith, *pers. comm.*).

North American steelhead most commonly spend two years in the ocean prior to migrating into freshwater to spawn, however, it is not unusual for some fish within populations of California and Oregon to spend only one year in the ocean prior to spawning (Busby, et al. 1996). The steelhead is somewhat unique from other anadromous salmonids in that it can spawn more than once, a trait known as “iteroparity” (Busby, et al. 1996). Steelhead spawning habitat is characterized by cool, clear, well-oxygenated streams that have a suitable depth, velocity and substrate size (Barnhart et al. 1986). Females lay eggs in depressions (“redds”) which they excavate in clean gravel substrates. The eggs are then fertilized by the male and immediately covered by the female. Spawning can occur in both perennial and seasonal streams, however young hatched in seasonal streams will migrate to perennial streams soon after hatching (Barnhart et al. 1986). Steelhead embryos are extremely sensitive to the dissolved oxygen concentration within the gravels of the redds, with an approximate concentration of 7.2 mg/L representing the lower limit of tolerance. The amount of oxygen reaching the embryo is a function of water velocity passing through the gravels of the redds, which in turn can be affected by the permeability of the gravels. Studies have found that hatching success rate increases in more permeable gravels, with the greatest success occurring in gravels with less than 5 percent by volume of sand and silt (Barnhart et al. 1986). The amount of oxygen within the gravels can also be significantly reduced if they contain a large amount of decaying organic matter (Barnhart et al. 1986). Embryos develop much more slowly at low intra-gravel oxygen levels and generally result in weaker, smaller fry which are more vulnerable to mortality. Increased deposition of fine sediments into spawning streams can therefore have a significant adverse affect on the survival of both steelhead embryos and juveniles.

The length of time before steelhead eggs hatch is determined by several factors including stream temperature and dissolved oxygen concentrations, but typically occurs 19 to 80 days after the eggs are laid (Barnhart et al. 1986). The young steelhead will then remain in the gravel substrate for two to three weeks before making their way to the substrate surface. Upon emergence, the young typically remain in shallow water near the stream edge where they form schools but as they become older, individual fish will separate from these schools to establish and defend a territory. Mortality is high for juvenile steelhead during the first months after emergence. The young are predated upon by other fish including larger juvenile steelhead, sculpins (*Cottus* sp.) and rainbow trout; by birds such as great blue herons and belted kingfishers; by reptiles such as garter snakes (*Thamnophis* sp.) and by various mammals (Barnhart et al. 1986).

Juvenile steelhead prey on a variety of drifting aquatic and terrestrial invertebrates (Barnhart et al. 1986). They are sight-feeders and their ability to locate food is substantially hindered by turbid or low light conditions. Rearing can occur either in cool tributary waters or in warm, downstream habitats where food availability is high (Smith *pers. comm.*). In warmer waters with abundant food, the juveniles may actually grow more quickly than those in cooler environments because warmer temperatures will increase both digestion and metabolism. Optimum environmental temperatures for fish rearing is dependent upon several factors including food availability, the season, oxygen availability and the life stage of the fish (Smith, *pers. comm.*) but productive summer stream temperatures should be somewhere in the range of 10 to 15 degrees C (50 to 60 degrees F) (Barnhart et al. 1986). Steelhead have difficulty extracting oxygen from the water at any temperature above 20 degrees C (68 degrees F) regardless of how oxygen-rich the water is and temperatures above 24 degrees C (75 degrees F) are generally lethal. Unfortunately, the availability of rearing habitat for steelhead has been substantially reduced due to several anthropogenic factors including stream channel alteration, alteration of hydrologic regimes (water diversions and flood control measures), and increased sediment deposition due to poor land management practices (Barnhart et al. 1986).

Excessive sediment deposition has been determined to adversely impact juvenile steelhead both when held suspended in the water column or when deposited on the channel bed. Turbidity such as that caused by suspended particles can impair the ability of juveniles to locate and capture

prey, and fine sediments deposited over larger substrates in the channel bed also reduces food availability by decreasing invertebrate prey populations. If suspended particles reach certain concentrations, steelhead can also suffer direct physiological damage to their gill filaments (Barnhart et al. 1986).

Juveniles will typically remain in freshwater for two years prior to smolting and migrating to the ocean. The average size of the fish at the time of smolting will be about eight inches (Barnhart et al. 1986) and the outmigration typically occurs from March through May (Smith, *pers. comm.*). A major roadblock to successful passage of smolts includes low spring stream flows, often a result of freshwater diversions and ground water percolation operations (Smith, *pers. comm.*). The majority of their growth to sexual maturity occurs in the ocean where adult fish in the region typically reach a size of 23 inches after two years (Barnhart et al. 1986).

Potential to occur onsite. Dr. Mark Jennings, LOA Fisheries Ecologist believes steelhead may use this reach of Lower Penitencia Creek as a movement corridor only, with the lagoon downstream providing potentially important habitat for juveniles and adults during their migrations. This reach of the creek generally lacks gravelly bottoms required by steelhead for breeding habitat.

2.4.2 Western Pond Turtle (*Actinemys marmorata*). Federal Listing Status: None; State Listing Status: Species of Special Concern.

The western pond turtle is considered a California species of special concern.

Life history and ecology. The western pond turtle is the only native aquatic, freshwater turtle in California and normally associates with permanent or nearly permanent aquatic habitats, including streams, lakes, and ponds. Historically, this species occurred in Pacific Coast drainages from Washington to Mexico. This species occurs in aquatic habitats with 1) basking sites such as rocks and logs, 2) dense stands of submergent or emergent vegetation, 3) abundant aquatic invertebrate resources, 4) suitable nearby nesting sites, and 5) the lack of native and exotic predators (Bury 1972; Jennings and Hayes 1994). This species can move along streams

up to 3.1 miles (5 kilometers) in a short period of time, and they can tolerate at least 7 days without water (Jennings and Hayes 1994).

Potential to occur onsite. Western pond turtles were not observed on the site during the May 2012 field surveys. The closest known CNDDDB record is more than three miles from the site. However, western pond turtles are known to inhabit portions of Penitencia Creek. WPT could potentially use the riparian/wetland habitat of the site for feeding, basking, and as a movement corridor.

2.4.3 Burrowing Owl (*Athene cunicularia*). Federal Listing Status: None; State Listing Status: Species of Special Concern.

The burrowing owl is considered a California species of special concern. This decision was based on the fact that the burrowing owl's population levels were decreasing due to habitat destruction, roadside nesting (vulnerability to human interference) and, indirectly, ground squirrel poisoning.

Life history and ecology. The burrowing owl is a small, long-legged, semi-fossorial bird that averages a height of 9.5 inches, has an average wingspan of 23 inches, and weighs an average of 5.25 ounces. Burrowing owls are unique, as they are the only owl that regularly lives and breeds in underground nests. In California, these birds typically occur in the Central and Imperial Valleys, primarily utilizing ground squirrel burrows (or the burrows of other animals, e.g., badgers and kangaroo rats) found in grasslands, open shrub lands, deserts, and to a lesser extent, grazing and agricultural lands. Burrowing owls in this region are typically found in lower elevations and have strong site fidelity. Pairs have been known to return to the same area year after year, and some pairs are known to utilize the same burrow as the previous year. The breeding season for the burrowing owl runs from February to August, with a peak between April and July.

Potential to occur onsite. Neither burrowing owls nor evidence of their presence were observed during the May 15 and 16, 2012 surveys of the site. California ground squirrel burrows (*Otospermophilus beecheyi*) that can serve as potential nests for burrowing owls were absent

during this survey time. While burrowing owls are known to breed within this region, suitable breeding habitat in the form of burrows are presently absent.

2.5 JURISDICTIONAL WATERS

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the California Regional Water Quality Control Board (RWQCB). Aquatic features are typically only considered to be jurisdictional by USACE if they connect to other Waters of the United States per the U.S Supreme Court decision *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC Decision) and *Rapanos v. United States* and *Carabell v. Army Corps of Engineers* (referred to together as the Rapanos decision).

A formal wetland delineation and waters of the U.S. analysis has not been conducted as yet; however, the Penitencia Creek channel is presumed jurisdictional to the Ordinary High Water mark (OHWM) on opposing banks under Section 404 of the Clean Water Act and also would likely meet the USACE criteria for jurisdictional wetlands based on the observed hydrologic regime and vegetation present. The Regional Water Quality Control Board (RWQCB) would also likely consider the creek to be jurisdictional to the extent of OHW under Section 401 of the Clean Water Act. The extent of CDFG jurisdiction within creeks under Section 1600 of the Fish and Game Code is generally the top of bank or the dripline of riparian vegetation, whichever is greater. As riparian vegetation beyond the tops of the banks onsite is lacking, the extent of CDFG jurisdiction of Penitencia Creek onsite would appear to be the top of the bank.

3.0 IMPACTS AND MITIGATIONS

3.1 SIGNIFICANCE CRITERIA

Approval of general plans, area plans, and specific projects is subject to the provisions of the California Environmental Quality Act (CEQA). The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are carried out. CEQA is concerned with the significance of a proposed project's impacts. For example, a proposed development project may require the removal of some or all of a site's existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc., may replace those species formerly occurring on the site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed.

Whenever possible, public agencies are required to avoid or minimize environmental impacts by implementing practical alternatives or mitigation measures. According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest."

Specific project impacts to biological resources may be considered "significant" if they would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a “mandatory findings of significance” if the project has the potential to

Substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory.

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 Threatened and Endangered Species

State and federal “endangered species” legislation has provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as “species of special status.” Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the “take” of a listed species. “Take” is defined by the state of California as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” (California Fish and Game Code, Section 86). “Take” is more broadly defined by the federal Endangered Species Act to include “harm” (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both

agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.2 Migratory Birds

State and federal laws also protect most birds. The Federal Migratory Bird Treaty Act (16 U.S.C., sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

3.2.3 Birds of Prey

Birds of prey are also protected in California under provisions of the State Fish and Game Code, Section 3503.5, which 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.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by the CDFG.

3.2.4 Bats

Section 2000 and 4150 of the California Fish and Game Code states that it is unlawful to take or possess a number of species, including bats, without a license or permit as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To harass is defined as “an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering.” For these reasons, bat colonies in particular are considered to be sensitive and therefore, disturbances that cause harm to bat colonies are unlawful.

3.2.5 Wetlands and Other Jurisdictional Waters

Natural drainage channels and adjacent wetlands may be considered “Waters of the United States” (hereafter referred to as “jurisdictional waters”) subject to the jurisdiction of the U.S.

Army Corps of Engineers (USACE). The extent of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts.

Jurisdictional waters generally include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;
- All impoundments of waters otherwise defined as waters of the United States under the definition;
- Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above).

As recently determined by the United States Supreme Court in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (the SWANCC decision), channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds. However, the U.S Supreme Court decisions *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers* (referred together as the Rapanos decision) impose a "significant nexus" test for federal jurisdiction over wetlands. In June 2007, the USACE and Environmental Protection Agency (EPA) established guidelines for applying the significant nexus standard. This standard includes 1) a case-by-case analysis of the flow characteristics and functions of the tributary or wetland to determine if they significantly affect the chemical, physical, and biological integrity of downstream navigable waters and 2) consideration of hydrologic and ecologic factors (EPA and USACE 2007).

The USACE regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by “ordinary high water marks” on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by water), and wetland hydrology according to

methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1991). Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The filling of isolated wetlands, over which the USACE has disclaimed jurisdiction under the SWANCC decision, is regulated by the RWQCB. It is unlawful to fill isolated wetlands without filing a Notice of Intent with the RWQCB. The RWQCB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

The California Department of Fish and Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1602 of the California Fish and Game Code (2003). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protect the habitat values of the drainage in question.

3.2.6 Local Ordinances, Policies, and Habitat Conservation Plans

Tree ordinance. The City of Milpitas has a Tree Protection and Heritage Tree Program (Title X, Chapter 2, Section 7 of the Milpitas Municipal Code).

Trees protected under the ordinance include:

- All trees which have a fifty-six-inch (56") or greater circumference of any trunk measured 4 ½ feet from the ground and located on developed residential property.
- All trees which have a thirty-seven-inch (37") or greater circumference of any trunk measured 4 ½ feet from the ground and located on developed commercial or industrial property.

- All trees which have a thirty-seven-inch (37") or greater circumference of any trunk measured 4 ½ feet from the ground, when removal relates to any transaction for which zoning approval or subdivision approval is required.
- Any tree existing at the time of a zoning or subdivision approval and was a specific subject of such approval or otherwise covered by subsection (b) above.
- All trees which have a thirty-seven-inch (37") or greater circumference of any trunk measured 4 ½ feet from the ground and located on a vacant, undeveloped or underdeveloped property.
- All trees or groves of trees that have been identified by the City as heritage trees.

Santa Clara Valley HCP/NCCP. Currently there is no adopted Habitat Conservation Plan that covers the study area. Six local partners (the County of Santa Clara, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, and the Cities of San Jose, Gilroy and Morgan Hill) and two wildlife agencies (the California Department of Fish and Game and the U.S. Fish and Wildlife Service) are in the process of designing a multi-species habitat conservation plan. The study area of the Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP) primarily covers southern Santa Clara County as well as the City of San Jose with the exception of the bayland areas. The HCP/NCCP will address listed species and species that are likely to become listed during the plan's 50-year permit term. The covered species include, but are not limited to, western burrowing owl, California tiger salamander, and California red-legged frog. The (HCP/NCCP) Planning Agreement requires that the agencies comment on reportable interim projects and recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives and not preclude important conservation planning options or connectivity between areas of high habitat value.

3.3 IMPACTS AND MITIGATIONS SPECIFIC TO THE PROJECT SITE

The proposed project is the redevelopment of the site with an 84-home single-family detached neighborhood with parks with pedestrian access to the current trail along Lower Penitencia Creek, and a clear span, 10-foot wide pedestrian bridge crossing Lower Penitencia Creek. The bridge will be constructed toward the southern edge of the proposed neighborhood, approximately halfway between the current creek crossings with concrete landings on the levy which will be designed to improve the integrity of the levy. Redevelopment of the site will include demolition of all onsite buildings and asphalt, removal of onsite trees within the currently developed area, but reserving most onsite street trees within 20 feet of the California Circle roadway. Trees on the western slope of the levy along the creek will not be impacted by new development and may or may not remain depending on the Army Corps of Engineers' review. The pedestrian bridge will be constructed off-site and put in place with a crane. The bridge is proposed as a clear span structure that will be placed on top of the levies on either side of Lower Penitencia Creek and, therefore, will not have any footings, cantilevers, or other supports within the creek or between the banks.

3.3.1 Loss of Habitat for Special Status Plants

Potential Impacts. Several special status vascular plant species are known to occur, or to once have occurred, in the general project vicinity (Section 2.3; Table 2). Several of them may have once occurred in habitats of the site prior to the site's development. However, the site, including the channel of Penitencia Creek, have been developed or highly modified from their original natural state and no longer provide habitat for any of these special status plants. Due to the fact that all of these species are considered to be absent from the site, site development would have no effect on regional populations of these species since the site provides no habitat for special status plants. Therefore, state and federal laws protecting special status plants would not be relevant to development of the site.

Mitigation. Mitigation measures are not warranted.

3.3.2 Loss of Habitat for Special Status Animals

Potential Impacts. 26 special status animal species occur, or once occurred, regionally (Table 1). Of these, 17 species would be absent or unlikely to occur on the site due to a lack of suitable habitat for these species. These species include the vernal pool tadpole shrimp, bay checkerspot butterfly, California tiger salamander, California red-legged frog, foothill yellow-legged frog, Alameda whipsnake, golden eagle, American peregrine falcon, northern harrier, California black rail, California clapper rail, bank swallow, western snowy plover, Alameda song sparrow, salt-marsh harvest mouse, salt-marsh wandering shrew, and San Francisco dusky-footed woodrat.

The remaining 9 special status animal species from Table 1 potentially occur more frequently as regular foragers, transients, or may be resident to the site. These include the steelhead, western pond turtle, California least tern, white-tailed kite, western burrowing owl, saltmarsh common yellowthroat, tricolored blackbird, pallid bat, and Townsend's big-eared bat. None of these species were observed on the site during the May 2012 site visits. The incremental small loss of foraging habitat for these 12 species and loss of potential breeding habitat for the bird species is considered a less than significant impact.

Mitigation. Mitigation measures are not warranted for loss of habitat for special status animal species (see sections below that discuss potential impacts to individuals).

3.3.3 Monitoring of Potential Impacts to Riparian Systems

Potential Impacts. The 10-foot wide clear span pedestrian bridge will be constructed off-site and put in place with a crane; it will be placed on top of the levies on either side of Lower Penitencia Creek and will not have any footings, cantilevers, or other supports within the creek or below top-of-bank, therefore, it will have a less-than-significant impact on the riparian system of Lower Penitencia Creek. All other aspects of the redevelopment project will not impact the riparian system. While vegetation within the riparian system will not be disturbed during project construction, the proposed project would result in temporary disturbance in the form of noise, erosion, construction debris inadvertently getting into the creek, and disturbance of special status species including the steelhead, western pond turtle, and nesting birds, particularly while

building the clear span bridge. If the mitigation measures below are adopted by the project, impacts will be reduced to a less-than-significant level.

Mitigation. Implementation of the following avoidance, minimization, and compensation measures would adequately address impacts to steelhead, western pond turtles, and nesting birds.

The project should implement the following measures:

- Prior to the start of construction, a qualified biologist should train all construction personnel regarding habitat sensitivity, identification of special status species, and required practices.
- Pre-construction surveys should be conducted to ensure that western pond turtles (WPT) and nesting birds are absent from the construction area. If an active bird nest is observed, then an appropriate construction-free buffer will be established by a qualified biologist. If WPT are present, a qualified biologist possessing all necessary permits should relocate them.
- Silt fencing and appropriate erosion control shall be in place separating the riparian system from the area impacted by construction prior to construction activities. This silt fencing may act as a barrier to keep WPT from entering the area of construction, and will ensure that the creek is not adversely affected during construction and will maintain its ability to allow steelhead to migrate through this reach of Lower Penitencia Creek (monitoring of this area will follow mitigation measures in Section 3.3.7).
- A biological monitor should be present onsite during particular times of construction including construction of the bridge to ensure no steelhead, WPT, or nesting birds are harmed, injured, or killed during project buildout and the monitoring of the silt fence will follow Section 3.3.7.

3.3.4 Disturbance to Nesting Raptors and Migratory Birds

Potential Impacts. Although no stick nests have been observed, trees of the site provide suitable nesting habitat for tree-nesting raptors and migratory birds. Special status birds such as the white-tailed kite, saltmarsh common yellowthroat, and tricolored blackbird, as well as non-special status migratory birds may also nest in the riparian habitat onsite. If a raptor or other migratory bird (including special status birds), regardless of its federal or state status, were to nest on or adjacent to the site prior to or during proposed construction activities, such activities could result in the abandonment of active nests or direct mortality to these birds. Construction activities that adversely affect the nesting success of raptors or result in mortality of individual

birds constitutes a violation of state and federal laws (see Section 3.2.3) and would be considered a significant impact under CEQA.

Mitigation. To the maximum extent practicable, any trees planned for removal should be removed during the non-breeding season (September 1 through January 31). If it is not possible to avoid tree removal or other disturbances during the breeding season (February 1 through August 31), a qualified biologist should conduct a pre-construction survey for tree-nesting raptors and other tree- or ground-nesting migratory birds in all trees or other areas of potential nesting habitat within the construction footprint and within 250 ft. of the footprint, if such disturbance will occur during the breeding season. This survey should be conducted no more than 14 days prior to the initiation of demolition/construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). If nesting raptors or migratory birds are detected on the site during the survey, a suitable construction-free buffer should be established around all active nests. The precise dimension of the buffer (up to 250 ft.) would be determined at that time and may vary depending on location and species. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. Pre-construction surveys during the non-breeding season are not necessary, as the birds are expected to abandon their roosts during construction activities. Implementation of the above measures would mitigate impacts to tree-nesting raptors and other migratory birds to a less-than-significant level.

3.3.5 Impacts to Western Burrowing Owl.

Potential Impacts. No burrowing owls nor suitable breeding habitat occurred on site during the May 2012 site visits. As the western burrowing owl is a volant species and should there be a shift in their present distribution in the future, they may once again overwinter and/or breed on suitable sites in the Milpitas region. However, any future use is speculative at best. Nonetheless, if a burrowing owl were to nest or overwinter in the proposed development area prior to the start of construction, construction activities could result in the abandonment of active nests or direct

harm, injury or death to these birds. Construction activities that adversely affect the nesting success or result in mortality of individual owls would be considered a significant impact to individual owls.

Therefore, while it is highly unlikely they should occur onsite prior to construction as there is a lack of suitable burrows, there are expected to be current efforts to expand owl distribution in the Santa Clara Valley related to the Santa Clara Valley HCP. Should that effort succeed and burrowing owls are found to occupy (either breeding or overwintering) the development area prior to construction, project buildout would result in the permanent loss of burrowing owl habitat. While unlikely, this document has taken the conservative approach to accommodate vagaries in the schedule for future buildout. Therefore, construction could result in significant loss of habitat for the western burrowing owl if they are occupying the site prior to construction. Additionally, this may result in harm or injury to individuals of this species, which would constitute a significant adverse impact.

Mitigation. Mitigation for the western burrowing owl is therefore warranted and should include the following mitigation measures.

- **Mitigation Measure 3.3.6a:** In order to avoid impacts to active burrowing owl nests, a qualified biologist should conduct pre-construction surveys for burrowing owls within the construction footprint and within 250 feet of the footprint no more than 30 days prior to the onset of ground disturbance. These surveys should be conducted in a manner consistent with accepted burrowing owl survey protocols. If pre-construction surveys determine that burrowing owls occupy the site during the non-breeding season (September 1 through January 31), then a passive relocation effort (e.g., blocking burrows with one-way doors and leaving them in place for a minimum of three days) may be necessary to ensure that the owls are not harmed or injured during construction.
- **Mitigation Measure 3.3.6b:** Once it has been determined that owls have vacated the site, the burrows can be collapsed, and ground disturbance can proceed. If burrowing owls are detected within the construction footprint or immediately adjacent lands (i.e., within 250 feet of the footprint) during the breeding season (February 1 through August 31), a construction-free buffer of 250 feet should be established around all active owl nests. The buffer area should be enclosed with temporary fencing, and construction equipment and workers should not enter the enclosed setback areas. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. After the

breeding season, passive relocation of any remaining owls by a qualified biologist may take place.

- **Mitigation Measure 3.3.6c:** Should burrowing owls be found to be occupying the site (breeding or overwintering) prior to construction, then the permanent loss of owl habitat would need to be compensated for with onsite or offsite set-asides of habitat that is suitable for the owl. These land set-asides should be of equal or higher value than the habitat lost. The amount of suitable nesting and foraging burrowing owl habitat to be preserved typically ranges from a ratio of 6.5 acres per nesting pair to a 1:1 replacement-to-removal ratio (one acre of replacement habitat for every acre lost that was utilized by the owl(s)), depending on the abundance and location of the onsite owls.
- **Mitigation Measure 3.3.6d:** Should the Santa Clara Valley Habitat Conservation Plan be approved prior to permits, the project site would be within the Expanded Study Area and Permit Area of Burrowing Owl Conservation and the project would be required to shall follow all actions required by the SCVHCP as it pertains to the burrowing owl.

3.3.6 Impacts to Pallid Bats, Townsend's Big-eared Bats, and Other Roosting Bats.

Potential Impacts. A number of bat species including, but not limited to the pallid bat and Townsend's big-eared bat may forage on the site year-round or during migration. Onsite buildings to be removed do not provide suitable roosting habitat. Demolition of onsite buildings designated for removal would result in a less-than-significant loss of habitat for bats.

Mitigation. Current plans for site development would not result in the mortality of roosting bats, and therefore, under the current plans for site development, no mitigation is warranted for the development of the California Circle Phase I Property.

3.3.7 Disturbance to Wetlands and Other Jurisdictional Waters

Potential Impacts. Most of the project, i.e. the construction of the homes within the footprint of already developed areas of the site, is expected to have no impacts to sensitive riparian habitats or regulated waters of the U.S. and state. The only potential impacts to sensitive riparian and wetland areas and regulated waters would occur as a result of construction of the proposed pedestrian bridge. Current plans for a 10-foot wide clear span pedestrian bridge will not impact the creek or riparian vegetation as it will be constructed off-site and put in place with a crane; it will be placed on top of the levies on either side of Lower Penitencia Creek and will not have

any footings, cantilevers, or other supports within the creek or below top-of-bank. However, should plans change so that riparian vegetation is removed from within the channel; or if footings, abutments, or bank stabilization becomes necessary within the channel or below top-of-bank, this could result in potentially significant impacts to jurisdictional areas and may require permits from one or a combination of regulating agencies including USACE, RWQCB or CDFG. These impacts may also be considered significant under CEQA and require compensatory measures.

Mitigation. Currently, the extent of potential impact to sensitive riparian habitats and regulated wetlands and tributary waters limited to noise, and would result in a less-than-significant impact. However, inadvertent impacts could occur as a result of bridge installation such as siltation and debris into the creek. The following mitigation measures when implemented would reduce these impacts to a less-than-significant level.

- Suitable erosion controls such as silt fence and waddles will be placed between the sensitive area of riparian habitat and the area of construction impacts under direction of a qualified biologist as to prevent impacts to the riparian/wetland habitat.
- During construction, a qualified biologist will provide biological training to all construction staff and subs outlining the identification of and biology of special status species and sensitive habitat that may be affected by the project (including mitigation measures defined in Section 3.3.3).
- During construction, a qualified biologist will monitor the silt fence and other barriers to the riparian/wetland habitat, and notify the foreman onsite of any required repairs.

3.3.8 Disturbance to Ordinance-Size and Heritage Trees

Potential Impacts. LOA did not conduct a tree survey for this project site, however, HortScience conducted a tree survey dated April of 2012. Should the removal of trees be required, the applicant will follow the City of Milpitas tree ordinance and apply for a tree permit and should any ordinance-size trees or heritage trees occur on the project site.

Mitigation. Prior to the removal of any onsite trees of ordinance size or any heritage trees, including ornamental trees associated with the existing development, a permit would need to be

secured from the City of Milpitas. Any trees removed may require appropriate tree replacement mitigation (e.g. tree replacement at appropriate ratios depending on species and size) as determined by the City of Milpitas' Planning Department to reduce impacts resulting from tree removal to a less-than-significant level.

3.3.9 Loss of Habitat for Native Wildlife

Potential Impacts. The only biotic habitat onsite that is considered sensitive is Lower Penitencia Creek and its associated riparian/wetland habitat. This habitat will only be impacted by a 10-foot wide clear span pedestrian bridge that will act as a footpath to cross the creek. The remainder of the study area consists of developed land, which provides low-quality habitat for most species. Due to the small amount of impact to Lower Penitencia Creek and its associated riparian/wetland habitat, the loss of habitat for native wildlife resulting from the proposed project would constitute a less-than-significant impact.

Mitigation. Mitigation measures are not warranted.

3.3.10 Interference with the Movement of Native Wildlife

Potential Impacts. The developed portion of the site does not act as a movement corridor, however, Lower Penitencia Creek facilitates the movement of wildlife through the region, from the San Francisco Bay inland, however, the surrounding land use is sparse highly developed, so this property does not function as an important movement corridor for native wildlife except those wildlife requiring creek or riparian habitat for movement such as steelhead. As the only impact to the creek that is proposed is a 10-foot wide clear span pedestrian bridge, impacts to steelhead movement are less-than-significant. If footings in within the creek banks become necessary, the impact to steelhead movement would still be less-than-significant. Site development is not expected to have a significant effect on home range and dispersal movements of native wildlife that may occur in the region. Therefore, the project will result in a less-than-significant impact on the movements of native wildlife.

Mitigation. Mitigation measures are not warranted.

3.3.11 Degradation of Water Quality in Seasonal Drainages and Downstream Waters

Potential Impacts. Site development can result in soils being left barren in the development footprint. Additionally, extensive grading often leaves the soils of construction zones barren of vegetation and, therefore, vulnerable to erosion. Eroded soil can be carried as sediment in seasonal creeks to be deposited in creek beds and adjacent wetlands. However, the development envelope for the redevelopment portion of the project on the site is nearly level and the 10-foot wide clear span pedestrian bridge will be craned into place. Therefore, the potential for erosion and the degradation of water quality in off-site waters is small and will most likely be limited to planned parking lot areas.

Furthermore, the applicant is expected to comply with the provisions of a City of Milpitas grading permit, including standard erosion control measures that employ best management practices (BMPs). Compliance with the permit(s) should result in no impact to water quality in seasonal creeks and downstream waters from the proposed project and should not result in the deposition of pollutants and sediments in sensitive riparian and wetland habitats.

Mitigation. Mitigation measures are not warranted.

3.3.12 Local Habitat Conservation Plans

Potential Impacts. The Santa Clara Valley HCP, should it be implemented prior to project permitting, only applies to this project as it pertains to the burrowing owl, as the project site is outside the influence of the SCVHCP with the exception of the Expanded Study Area and Permit Area of Burrowing Owl Conservation. If this HCP were approved prior to site development, the project would be subject to the provisions addressed in this HCP.

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APPENDIX A: TERRESTRIAL VERTEBRATE SPECIES THAT POTENTIALLY OCCUR ON THE STUDY AREA

The species listed below are those that may reasonably be expected to use the habitats of the study area. The list was not intended to include birds that are vagrants or occasional transients. Its purpose was rather to include those species that may be expected to routinely and predictably use the study area during some or all of the year. An asterisk denotes a species observed on the project site during the surveys conducted in May of 2012.

CLASS: AMPHIBIA

ORDER: CAUDATA

FAMILY: SALAMANDRIIDAE (Newts)

California Newt (*Taricha torosa*)

FAMILY: PLETHODONTIDAE (Lungless Salamanders)

Yellow-eyed Ensatina (*Ensatina eschscholtzii xanthoptica*)

Arboreal Salamander (*Aneides lugubris*)

California Slender Salamander (*Batrachoseps attenuatus*)

ORDER: ANURA (Frogs and Toads)

FAMILY: HYLIDAE (Treefrogs and Relatives)

Pacific Treefrog (*Hyla regilla*)

CLASS: REPTILIA

ORDER: SQUAMATA (Lizards and Snakes)

SUBORDER: SAURIA (Lizards)

FAMILY: SCINCIDAE (Skinks)

Western Skink (*Eumeces skiltonianus*)

FAMILY: PHRYNOSOMATIDAE

Western Fence Lizard (*Sceloporus occidentalis*)

FAMILY: ANGUIDAE (Alligator Lizards and Relatives)

Alligator Lizard (*Elgaria multicarinata*)

SUBORDER: SERPENTES (Snakes)

FAMILY: COLUBRIDAE (Colubrids)

California Kingsnake (*Lampropeltis getua californiae*)

Pacific Gopher Snake (*Pituophis catenifer catenifer*)

Terrestrial Garter Snake (*Thamnophis elegans*)

CLASS: AVES

ORDER: PELECANIFORMES (Tropicbirds, Pelicans, and Relatives)

FAMILY: PELECANIDAE (Pelicans)

*American White Pelican (*Pelecanus erythrorhynchos*)

FAMILY: PHALACROCORACIDAE (Cormorants)

*Double-crested Cormorant (*Phalacrocorax auritus*)

ORDER: CICONIIFORMES (Herons, Storks, Ibises, and Relatives)

FAMILY: ARDEIDAE (Herons and Bitterns)

*Great Egret (*Ardea alba*)

*Snowy Egret (*Egretta thula*)

*Great Blue Heron (*Ardea herodias*)

FAMILY: CATHARTIDAE (American Vultures)
Turkey Vulture (*Cathartes aura*)

ORDER: ANSERIFORMES (Screamers, Ducks, and Relatives)
FAMILY: ANATIDAE (Swans, Geese, and Ducks)
* Canada Goose (*Branta canadensis*)
*Mallard (*Anas platyrhynchos*)

ORDER: FALCONIFORMES (Vultures, Hawks, and Falcons)
FAMILY: ACCIPITRIDAE (Hawks, Old World Vultures, and Harriers)
White-tailed Kite (*Elanus caeruleus*)
*Red-shouldered Hawk (*Buteo lineatus*)
Red-tailed Hawk (*Buteo jamaicensis*)
Cooper's Hawk (*Accipiter cooperii*)
Golden Eagle (*Aquila chrysaetos*)

FAMILY: FALCONIDAE (Caracaras and Falcons)
American Kestrel (*Falco sparverius*)

ORDER: GALLIFORMES (Magapodes, Curassows, Pheasants, and Relatives)
FAMILY: PHASIANIDAE (Quails, Pheasants, and Relatives)
Wild Turkey (*Meleagris gallopavo*)

FAMILY: ODONTOPHORIDAE (New World Quail)
California Quail (*Callipepla californica*)

ORDER: COLUMBIFORMES (Pigeons and Doves)
FAMILY: COLUMBIDAE (Pigeons and Doves)
Mourning Dove (*Zenaida macroura*)
Rock Dove (*Columba livia*)

ORDER: STRIGIFORMES (Owls)
FAMILY: STRIGIDAE (Typical Owls)
Burrowing Owl (*Athene cunicularia*)

ORDER: APODIFORMES (Swifts and Hummingbirds)
FAMILY: TROCHILIDAE (Hummingbirds)
*Anna's Hummingbird (*Calypte anna*)
Rufous Hummingbird (*Selasphorus rufus*)

ORDER: PICIFORMES (Woodpeckers and Relatives)
FAMILY: PICIDAE (Woodpeckers and Wrynecks)
Acorn Woodpecker (*Melanerpes formicivorus*)
Northern Flicker (*Colaptes auratus*)
* Nuttall's Woodpecker (*Picoides nuttallii*)

ORDER: PASSERIFORMES (Perching Birds)
FAMILY: TYRANNIDAE (Tyrant Flycatchers)
*Black Phoebe (*Sayornis nigricans*)
Say's Phoebe (*Sayornis saya*)

FAMILY: CORVIDAE (Jays, Magpies, and Crows)
*Western Scrub Jay (*Aphelocoma californica*)
*American Crow (*Corvus brachyrhynchos*)
Common Raven (*Corvus corax*)

FAMILY: HIRUNDINIDAE (Swallows)
*Cliff Swallow (*Petrochelidon pyrrhonota*)

FAMILY: PARIDAE (Titmice and Relatives)
Chestnut-backed Chickadee (*Poecile rufescens*)

FAMILY: SITTIDAE (Nuthatches)

- White-breasted Nuthatch (*Sitta carolinensis*)
- FAMILY: TURDIDAE (Thrushes)**
 - Western Bluebird (*Sialia Mexicana*)
 - *American Robin (*Turdus migratorius*)
- FAMILY: MIMIDAE (Mockingbirds and Thrashers)**
 - *Northern Mockingbird (*Mimus polyglottos*)
- FAMILY: STURNIDAE (Starlings and Allies)**
 - *European Starling (*Sturnus vulgaris*)
- FAMILY: PARULIDAE (Wood Warblers and Relatives)**
 - Yellow-rumped Warbler (*Dendroica coronata*)
- FAMILY: THRAUPIDAE (Tanagers)**
 - Western Tanager (*Piranga ludoviciana*)
- FAMILY: EMBERIZIDAE (Emberizines)**
 - White-crowned Sparrow (*Zonotrichia albicollis*)
 - Dark-eyed Junco (*Junco hyemalis*)
 - *Song Sparrow (*Melospiza melodia*)
 - *California towhee (*Pipilo crissalis*)
- FAMILY: ICTERIDAE (Blackbirds, Orioles and Allies)**
 - Western Meadowlark (*Sturnella neglecta*)
 - Brewer's Blackbird (*Euphagus cyanocephalus*)
 - * Red-winged Blackbird (*Agelaius phoeniceus*)
- FAMILY: FRINGILLIDAE (Finches)**
 - Lesser goldfinch (*Carduelis psaltria*)
 - *House Finch (*Carpodacus mexicanus*)
- FAMILY: PASSERIDAE (Old World Sparrows)**
 - *House Sparrow (*Passer domesticus*)

CLASS: MAMMALIA

- ORDER: DIDELPHIMORPHI (Marsupials)**
 - FAMILY: DIDELPHIDAE (Opossums)**
 - Virginia Opossum (*Didelphis virginiana*)
- ORDER: CHIROPTERA (Bats)**
 - FAMILY: VESPERTILIONIDAE (Evening Bats)**
 - Big Brown Bat (*Eptesicus fuscus*)
 - Pallid Bat (*Antrozous pallidus*)
 - Townsend's Big-eared Bat (*Corynorhinus townsendii*)
- ORDER: RODENTIA (Squirrels, Rats, Mice, and Relatives)**
 - FAMILY: SCIURIDAE (Squirrels, Chipmunks, and Marmots)**
 - California Ground Squirrel (*Otospermophilus beecheyi*)
 - FAMILY: GEOMYIDAE (Pocket Gophers)**
 - Botta's Pocket Gopher (*Thomomys bottae*)
 - FAMILY: MURIDAE (Mice, Rats and Voles)**
 - Deer Mouse (*Peromyscus maniculatus*)
 - California Meadow Vole (*Microtus californicus*)
 - FAMILY: SCIRIDAE (Squirrels, Chipmunks, and Marmots)**
 - *Eastern Fox Squirrel (*Sciurus niger*)
- ORDER: CARNIVORA (Carnivores)**
 - FAMILY: CANIDAE (Foxes, Wolves, and Relatives)**
 - Red Fox (*Vulpes vulpes*)
 - Gray Fox (*Urocyon cinereoargenteus*)

Domestic Dog (*Canis familiaris*)

FAMILY: PROCYONIDAE (Raccoons and Relatives)

Raccoon (*Procyon lotor*)

FAMILY: MUSTELIDAE (Weasels and Relatives)

* River Otter (*Lontra canadensis*)

FAMILY: MEPHITIDAE (Skunks)

Striped Skunk (*Mephitis mephitis*)

FAMILY: FELIDAE (Cats)

Feral Cat (*Felis catus*)

Bobcat (*Lynx rufus*)

ORDER: ARTIODACTYLA

FAMILY: CERVIDAE (Deer, Elk, and Relatives)

Black-tailed Deer (*Odocoileus hemionus columbianus*)