BIOLOGICAL RESOURCES REPORT

12429 Pescadero Creek Road (APN 082-050-010 & 020), San Mateo County, CA

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SOL ECOLOGY

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LIST OF ACRONYMS AND ABBREVIATIONS

CDFG/CDFW	California Department of Fish and Game/Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
ESA	Federal Endangered Species Act
MBTA	Migratory Bird Treaty Act
CRLF	California Red-legged Frog
WPT	Western Pond Turtle
SFDW	San Francisco dusky-footed woodrat
NRCS	Natural Resources Conservation Service
OHWM	Ordinary High-Water Mark
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WBWG	Western Bat Working Group

1.0 INTRODUCTION

On January 11, 2021 Sol Ecology, Inc. performed a biological resources assessment at 12429 Pescadero Creek Road, Loma Mar San Mateo County, California (Project Site). The proposed project includes APNs 082-050-010 & 020 (Appendix A – Figure 1).

The purpose of the assessment was to gather information necessary to complete a review of potential biological resource impacts from development of the proposed Project, under the guidelines of the California Environmental Quality Act (CEQA) for the County of San Mateo Planning Department. This report describes the results of the site assessment for the presence of sensitive biological resources protected by local, state, and federal laws and regulations. This report also contains an evaluation of potential impacts to sensitive biological resources that may occur from the proposed project and potential mitigation measures to compensate for those impacts as warranted. This assessment is based on information available at the time of the study and on-site conditions that were observed on the date of the site visit.

1.1 Project Setting

The Study Area is located on two parcels approximately one-half mile south the intersection of Highway 84 and Pescadero Creek Road, near the town of La Honda. The two parcels together make up the project study area and are approximately 261 acres in size. The site is located on south-facing slope along a ridgeline running east to west. Bisecting the property is the headwaters to McCormick Creek (on the eastern parcel) and the headwaters of a tributary to Kingston Creek (on the western parcel). A small area of development consisting of a roadway, residence and barn is present in the center of the Study Area bounded by dense oak woodland and redwood forest to the north and annual grassland and coastal scrub to the south. Elevations on the property range from 270 meters to 340 meters. The study area is bounded by forest, ranches, rural residential lots, and Sam McDonald Memorial State Park.

1.2 Project Description

The Peninsula Humane Society and SPCA proposes to construct a new animal sanctuary in the Study Area. The Animal Sanctuary would provide a permanent home for dogs, cats, and a limited number of other small farm animals. The project proposes to build 70 dog enclosures, 14 cat enclosures, and 1 barn for farm animals on a 222-acre site within the Resource Management Zoning District. In addition to the animal enclosures, the project also includes a maintenance building, and existing barn, a 1,000 square foot caretaker's residence, and a small veterinary medical center office. The sanctuary will be enclosed by fencing and be primarily located within parcel 082-050-020. Proposed activities also include installation of power poles and a powerline in both parcels on the north side of the site in the annual grassland connecting into coastal scrub on adjacent lands to the Project Study Area.

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2.0 METHODS

On January 11, 2021, the Project Study Area was traversed on foot to determine the presence of (1) plant communities both sensitive and non-sensitive, (2) special status plant and wildlife species, (3) presence of essential habitat elements for any special status plant or wildlife species, and (4) the presence and extent of wetland and non-wetland waters.

2.1 Literature Review

To evaluate whether special status species or other sensitive biological resources (e.g., wetlands) could occur in the study area and vicinity, Sol Ecology biologists reviewed the following:

- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California search for U.S. Geological Survey (USGS) 7.5-minute La Honda quadrangle and eight adjacent quadrangles (CNPS 2021a);
- California Natural Diversity Database (CNDDB) records search for USGS 7.5-minute La Honda quadrangle and eight adjacent quadrangles (California Department of Fish and Wildlife [CDFW] 2021);
- U.S. Fish and Wildlife Service (USFWS) list of threatened and endangered species for the Project Study Area (IPaC) (USFWS 2021a);
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)
- CDFG publication *California Bird Species of Special Concern* (Shuford and Gardali 2008)
- CDFW and University of California Press publication *California Amphibian and Reptile Species of Special Concern* (Thomson et al. 2016)
- USFWS National Wetlands Inventory, Wetlands Mapper (USFWS 2021b); and
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Web Soil Survey (USDA 2019).

Based on information from the above sources, Sol Ecology developed lists of special status species and natural communities of special concern that could be present in the Project vicinity (Appendix B). Figures 2 and 3 present the results of a 5-mile CNDDB record search around the study area for special status plants and wildlife (Appendix A). All biological resources are evaluated for their potential to occur within the study area in Section 3.0 of this report.

2.2 Field Survey

Sol Ecology biologists conducted biological resource surveys on January 13, 2019, May 17, 2019, June 1, 2020, and January 11, 2021. Field surveyor qualifications are in Appendix C. Biologists walked throughout the entire study area identifying all plant and wildlife species encountered

and mapping vegetation communities. Plant species were recorded and identified to a taxonomic level sufficient to determine rarity using the second edition of the *Jepson Manual* (Baldwin et al. 2012). All plant species observed in the study area are included in Appendix E – Rare Plant Survey Report: Observed Species Table. Vegetation communities were identified using the online version of *A Manual of California Vegetation* (CNPS 2021b). Dispersal habitat, foraging habitat, refugia or estivation habitat, and breeding (or nesting habitat) were noted for wildlife species.

In cases where little information is known about species occurrences and habitat requirements, the species evaluation was based on best professional judgment of Sol Ecology biologists with experience working with the species and habitats. If a special status species was observed during the site visit, its presence is recorded and discussed. For some threatened and endangered species, a site survey at the level conducted for this report may not be sufficient to determine presence or absence of a species to the specifications of regulatory agencies.

A formal wetland delineation was conducted at the time of the January site visits. Sol Ecology identified wetland and non-wetland waters potentially subject to regulation by the federal government (U.S. Army Corps of Engineers [USACE]) and the state of California (Regional Water Quality Control Board [RWQCB] and CDFW). The delineation of wetland boundaries was based on the presence/absence of indicators of hydrophytic vegetation, hydric soil, and wetland hydrology. The boundaries of non-wetland waters were identified by locating the ordinary high-water mark (OHWM).

The USACE and RWQCB recognize a three-parameter approach to wetland delineation where a feature must contain hydrophytic vegetation, hydric soils, and wetland hydrology. The methodology for identifying wetland indicators followed the *USACE Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). Plant species within potential wetlands were assigned a wetland status according to the USACE list of plant species that occur in wetlands (USACE 2018). This wetland plant classification system is based on the expected frequency of occurrence of each species in wetlands. The classification system has the following categories, which determine the frequency with which plants occur in wetlands:

OBL	Obligate, almost always found wetlands	>99% frequency
FACW	Facultative wetland, usually found in wetlands	67-99%
FAC	Facultative, equal in wetland or non-wetlands	34-67%
FACU	Facultative upland, usually found in non-wetlands	1-33%
UPL/NL	Not found in local wetlands	<1%
NI	Wetland preference unknown	

Species with OBL, FACW, and FAC classifications are considered hydrophytic vegetation. If more than 50 percent of the dominant plant species are hydrophytic, the area meets the hydrophytic vegetation criterion.

Soils in the study area were examined for hydric soil indicators. Soils formed under wetland (anaerobic) conditions generally have a low chroma matrix color, designated 0, 1, or 2, and contain mottles or other redoximorphic features. Soil profiles were characterized by depth, color, redoximorphic features, and texture. Soil color and chroma were determined using the *Munsell Soil Color Book* to determine if the soils in a particular area could be considered hydric (Munsell Color 2009).

Positive indicators of wetland hydrology can include direct evidence (primary indicators), such as visible inundation or saturation, surface sediment deposits, oxidized root channels, and drift lines, or indirect indicators (secondary indicators) such as algal mats, shallow restrictive layers in the soil, or vegetation meeting the FAC-neutral test. Depressions, seeps, and topographic low areas were examined for these hydrological indicators.

3.0 RESULTS

3.1 Existing Conditions and General Wildlife Use

Elevations within the Project Study Area range from approximately from 270 to 340 meters (885 to 1115 feet) above mean sea level. The Project Study Area encompasses 7 soil map units identified by the USDA, NRCS (USDA 2019):

- **Lobitos loam, 16 to 30 percent slopes - LID2:** This soil map unit comprises the majority of the Project Study Area. It is a moderately deep, well-drained soil type is mostly used for pasture and range. The soil parent material is moderately hard sandstone and shale. Lobitos loam is not rated as hydric. Minor components include Gazos (4%), Pomponio (5%).
- **Lobitos loam, 7 to 16 percent slopes- LID3:** This soil map unit is similar to the Lobitos Loam described above.
- **Gazos loam 40 to 75 percent slopes- GbF2**: very steep, eroded. It is well drained and occurs in mountain slopes. The soil parent material is shale. Gazos loam is not rated as hydric. Minor components include Sweeney (5%), Lobitos (5%), Cotati (4%), and Calera (5%).
- **Lobitos loam, 30 to 41 percent slopes- LIE2:** This soil map unit is similar to the Lobitos Loam described above.
- **Hugo and Josephine loams, 45 to 75 percent slopes- HuF:** This soil map unit occurs within the northern portion of the study area along the ridgeline. It is well drained and occurs in mountain slopes. The soil parent material is derived from sandstone and shale. Hugo and

Josephine loams are not rated as hydric. Minor components include Los Gatos (10%) and Laughlin (10%).

- **Hugo and Josephine loams, 30 to 45 percent slopes- HuE:** This soil map unit is similar to the Hugo and Josephine loams described above.
- **Mindego clay loam, MdF:** soil map unit occurs in a small portion of the northeastern corner of the study area. It is well drained and occurs in mountain slopes. The soil parent material is basalt. Mindego clay loam is not rated as hydric. Minor components include Lobitos (10%), Santa lucia (5%).

Vegetation communities present in the study area were classified using the online version of *A Manual of California Vegetation* (CNPS 2021b). However, in some cases it is necessary to identify variants of community types or to describe non-vegetated areas that are not described in the literature. Vegetation communities were classified as non-sensitive or sensitive natural communities as defined by CEQA and other applicable laws and regulations. Photographs of the study area are provided in Appendix D.

Two erosional gullies were observed bisecting the property to the north of McCormick Creek and appears to drain directly into the small pond located upslope of the drainage headwaters. Erosional gullies are generally not considered jurisdictional but can over time develop into wetland habitat. A culvert was located across the roadway above the gully feature and appears to convey water from the roadside downslope into the small stock pond below, as shown in Appendix A, Figure 1 and Appendix D, photo 2. This feature will be avoided by the proposed project.

3.1.1 Non-Sensitive Natural Communities

Valley and Foothill Grassland Habitat (Non-Native Annual Grassland)

The Project Site is dominated by valley and foothill grassland habitat, in which native bunch grass species have been largely or entirely supplanted by introduced, annual Mediterranean grasses (Non-Native Annual Grassland), (Appendix D, photos 1-3). Stands rich in natives, however, can usually found on unusual substrates, such as serpentinite or somewhat alkaline soils (CDFW 2018). These non-native grasslands (Holland/CDFW 1986) are dominated by non-native annual grassland characterized by non-native (and invasive) annual grasses and native forbs and wildflowers in this case foxtail fescue (*Festuca myuros*), Italian rye grass (*F. perennis*) and clover species (*Trifolium ssp.*). Common wildlife species in this habitat includes: Botta's pocket gopher (*Sceloporus occidentalis*), deer mouse (*Peromyscus maniculatus*), western kingbird (*Tyrannus verticalis*), and western fence lizard (*Sceloporus occidentalis*).

3.1.2 Sensitive Natural Communities

Sensitive communities (based on vegetation alliances) are listed below and shown in Appendix A, Figure 1 (except for Redwood Forest which is present to the north of the Study Area, and in

patches along the eastern road). These alliances may also support other sensitive species such as special status plants and animals described in Section 3.2 and 3.3. In addition, potential federal and/or state jurisdictional areas are also considered sensitive as shown in Figure 1.

Redwood Forest

Redwood forest is present to the north of the Study Area on north facing slopes, mainly surrounding the existing barn with a patch of forest located along the road to the east. Redwood forest is also intermixed with riparian forest described below. This community has a rank of S3, which is the lowest of the sensitive ranks and thus any effects to this community would need to be considered under CEQA. In the Study Area, this vegetation alliance is mixed with coastal oak woodland, Douglas fir, black oak, and madrone (Appendix D, photo 3).

Intermittent Streams

Several potentially jurisdictional waters are present in the Study Area, including the headwaters to two blue-line streams, McCormick Creek and a tributary to Kingston Creek, which are considered to be Waters of the State and possibly the U.S., (Appendix A, Figure 1). A tributary to McCormick Creek is also present. McCormick Creek is considered perennial, though water does not flow year-round within the study area. The McCormick Creek tributary and the tributary to Kingston Creek are considered intermittent features. These features are highly eroded and top of bank as such, varies in width within the project study area.

Ponds

Two stock ponds and a small seep are also present and likely jurisdictional waters of the State based on their location relative to other waters (Appendix D, photos 4 and 5). These features have highly eroded banks due to heavy cattle use, and neither emergent nor submerged vegetation was evident.

Riparian

Riparian habitat surrounding stream features on the site consists of Coast live oak (*Quercus agrifolia*), redwood (*Sequoia sempervirens*), with an underlying shrub layer consisting of Himalayan blackberry (*Rubus armeniacus*), and coyote brush (*Baccharis pilularis*), (Appendix D, photo 6). No riparian vegetation is present surrounding the two stock ponds.

3.2 Special-Status Plants

Special status plant species include plant species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed species and those that are formal candidates for listing. Plant species on CNPS' Inventory of Rare and Endangered Plants of California with California Rare Plant Ranks of 1 and

2 are also considered special status plant species and must be considered under CEQA. Further, California Rare Plant Ranks 3 and 4 are evaluated within this report to ensure locally important plant species are evaluated for effect significance.

Based upon a review of the resources and databases given in Section 2.1, 89 special status plant species have been documented within a 9-quad search of the study area (Appendix B). Based on the presence of vegetation communities described above and soils at the site, the study area has the potential to support 7 special status plant species. In accordance with 2018 statewide protocols[1], floristic special-status plant surveys were performed on May 17, 2019 within the Project Area within the blooming period for the seven identified target species: *Arctostaphylos* andersonii (Anderson's manzanita)*, A. regismontana* (Kings Mountain manzanita)*, Plagiobothrys chorisianus* (Choris' popcornflower)*, Pedicularis dudleyi* (Dudley's lousewort)*, Malacothamus arculatus* (arcuate bush-mallow)*, Fissidens pauperculus* (minute pocket moss)*, and Dirca occidentalis* (western leatherwood). The findings from this site survey are included in the Rare Plant Survey (Appendix E). Additionally, floristic special-status plant surveys were performed during the site visit on June 1, 2020 for these seven and other special status plants. None of these species or other special status plants were found on site during either survey.

Other special status plant species documented within the 9-quad search are unlikely or have no potential to occur in the study area for one or more of the following reasons:

- Hydrologic conditions (e.g. marsh habitat, seeps, coastal habitat) necessary to support the special-status plants do not exist on site;
- Edaphic (soil) conditions (e.g. rocky or clay soils) necessary to support the special-status plants do not exist on site;
- Topographic conditions (e.g. flat plains, low altitude) necessary to support the special-status plants do not exist on site;
- Unique pH conditions (e.g. serpentine) necessary to support the special-status plant species are not present on the Project Site;
- Associated vegetation communities (e.g. cismontane woodland, broadleaved upland forest) necessary to support the special-status plants do not exist on site.

3.3 Special Status Wildlife

In addition to wildlife listed as federal or state endangered and/or threatened, federal and state candidate species, CDFW Species of Special Concern, CDFW California Fully Protected species, USFWS Birds of Conservation Concern, and CDFW Special-status Invertebrates are all considered special-status species. Although these species generally have no special legal status, they are given special consideration under CEQA. The federal Bald and Golden Eagle Protection Act also

[1] CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. March 20, 2018.

provides broad protections to both eagle species that are roughly analogous to those of listed species. Bat species are also evaluated for conservation status by the Western Bat Working Group (WBWG), a non-governmental entity; bats named as a "High Priority" or "Medium Priority" species for conservation by the WBWG are typically considered special-status and considered under CEQA; bat roosts are protected under CDFW Fish and Game Code. In addition to regulations for special-status species, most native birds in the United States (including non-status species) are protected by the federal Migratory Bird Treaty Act of 1918 (MBTA) and the California Fish and Game Code (CFGC), i.e., sections 3503, 3503.5 and 3513. Under these laws, deliberately destroying active bird nests, eggs, and/or young is illegal.

Based on the databases given in Section 2.1, 60 special status wildlife species have been documented within a 9-quad search of the study area (Appendix B). Based on the presence of biological communities described above, the Project Study Area has the potential to support 8 of these species, 2 of which are federal and/or state listed (Table 1). A discussion of potential effects or unlikelihood for effects to occur is provided in Section 4.1. Other special status wildlife species documented within the 9-quad search are unlikely or have no potential to occur in the study area for one or more of the following reasons:

- Absence of suitable hydrologic conditions (e.g., riverine, freshwater stream habitat, salt or brackish waters) necessary to support the special-status wildlife (e.g., tidewater goby, steelhead, foothill yellow-legged frog, Santa Cruz black salamander, California giant salamander).
- Absence of associated vegetation communities (e.g., marsh habitat) necessary to support special-status wildlife (e.g., saltmarsh harvest mouse, San Francisco garter snake, black rail, saltmarsh common yellowthroat, monarch butterfly, bay checkerspot butterfly).
- Absence of suitable habitat elements (e.g., cliffs, caves, mines, outcrops, snags, etc.) for most special-status bats (e.g., Townsend's big-eared bat or pallid bat).
- Absence of suitably sized burrows or evidence of potential dens on or immediately adjacent to the study area (e.g., for burrowing owl or American badger).

Note, while McCormick creek may provide foraging habitat for San Francisco garter snake and California giant salamander downstream of the property, these species are not likely to be found in headwaters near the project footprint. Furthermore, lack of vegetation and cover within the two stock pond habitats likely precludes San Francisco garter snake as well as western pond turtle.

Table 1. Special Status Animals with Potential to Occur in the Study Area

Scientific Name/ Common Name	Status[1]	Habitat	Potential for Occurrence
Mammals			
Lasiurus cinereus Hoary bat	WBWG Medium	Open forested habitats or mosaics, with access to trees for cover and open areas or edges for foraging. Requires water.	**Moderate potential**. May maternity roost in dense foliage of medium to large trees in redwood forest and oak woodland habitats near the project footprint.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	SSC	Forest habitats of moderate canopy and moderate to dense understory. Also, in chaparral habitats. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	**Low potential**. Suitable habitat is present in scrub habitats outside of the project footprint including McCormick Creek. Relatively steep slopes may preclude this species close to the project site. No woodrat houses were observed during any of the site visits.
Birds			
Aquila chrysaetos Golden eagle	CFP, BCC	Rolling foothills, mountain areas, and deserts. Nests in cliff-walled canyons and large trees within otherwise open areas.	**Low potential**. May nest in large trees located on ridgeline in Study Area; no nest structures observed during any of the site visits.
Brachyramphus marmoratus Marbled Murrelet	FT, SE	Nests in old-growth coniferous forests up to 30 miles inland from coast. Nests are highly cryptic and typically located on platform-like branches of mature redwoods and Douglas firs.	**Low Potential.** May nest **off-site** in forest habitat to the north or near access road; documented within one mile to south. Not likely to nest along habitat edges.
long-eared owl *Asio otus*	SSC	Occurs year-round in California. Nests in trees in a variety of woodland habitats, including oak and riparian. Requires adjacent open land with rodents for foraging, and the presence of old nests of larger birds (hawks, crows, magpies) for breeding.	**High potential.** Long-eared owls may be present in adjacent forest habitat near to open grassland foraging habitat, outside of the project footprint. This species is highly secretive and primarily nocturnal.
wrentit *Chamaea fasciata*	BCC	Lives in chaparral, oak woodlands, and scrub habitat. Often in areas with thick vegetation; nests on the ground.	**Moderate potential**. Suitable habitat is present in scrub habitat outside of the project footprint.
Amphibians and Reptiles			
Emys marmorata Western pond turtle	SSC	Aquatic turtle present in ponds, marshes, rivers, streams, and irrigation ditches with	**Low potential.** Ponds on the site do not contain suitable basking substrate and lack emergent vegetation cover. This

		aquatic vegetation and basking sites. Nests in uplands within 100 m of breeding sites.	species may seek refuge near ponds during periods of high flow in downstream habitats but are not likely to nest on the site due to the lack of loose soils and presence of cows.
Rana draytonii California red-legged frog	FT, SSC	Breeds in quiet perennial to intermittent ponds and stream pools that hold water for 11 to 20 weeks. Prefers shorelines with extensive vegetation. Disperse though uplands after rains.	**Moderate potential.** May utilize ponds on the site for non-breeding aquatic habitat during the summer months; not likely to estivate on the site. Drainages to the south also provide dispersal habitat and cover. The project area is not within any known dispersal corridor. The project is not located within designated critical habitat for CRLF.

[1] FE/SE – Federal/State Endangered FT/ST – Federal/State Threatened
SCE/T – State Candidate Endangered/Threatened CFP – California Fully Protected
SSC – Species of Special Concern BCC – Bird of Conservation Concern
SSI – Special Status Invertebrate LC – Species of Local Concern
WBWG – Western Bat Working Group – Medium or High Priority Species

4.0 POTENTIAL EFFECTS AND MITIGATION

The assessment of effects under CEQA is based on the change caused by the Project relative to the existing conditions within the Project Study Area. In applying CEQA Appendix G, the terms "substantial" and "substantially" are used as the basis for significance determinations in many of the thresholds but are not defined qualitatively or quantitatively in CEQA or in technical literature. In some cases, the determination requires application of best professional judgment based on knowledge of site conditions as well as the ecology and physiology of biological resources present in a given area. The CEQA and State CEQA Guidelines defines "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." Pursuant to Appendix G, Section IV of the State CEQA Guidelines, the proposed Project would have a significant effect on biological resources if it would:

A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.

C. 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.

D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

E. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.1 Potentially Significant Effects and Mitigation Measures

4.1.1 Sensitive Biological Communities

Sensitive communities present in the Study Area include redwood forest vegetation alliance, riparian habitat, and potential Waters of the State including two headwater streams, two stock ponds, and a small seep. An erosional gully located to the west of the project is not likely

jurisdictional, but verification is needed to confirm; however, this feature will be avoided by the proposed project. The proposed project has been designed to avoid all sensitive communities on the site, including wetlands, riparian habitat, and species habitats (including movement corridors). Construction in proximity to intermittent streams may potentially result in accidental discharges of materials which in turn may affect water quality and/or contribute to erosional processes within headwater streams. Accidental discharges during construction would be considered a significant effect. The project will not conflict with the provisions of any habitat conservation or community conservation plan.

4.1.2 Special-Status Plant Species

In accordance with 2018 statewide protocols, floristic special-status plant surveys were performed on May 17, 2019 and June 1, 2020 within the Project Study Area for the seven species with potential to occur which are not identifiable year-round. No special status plants were found on site at either visit, and their absence indicates that their occurrence is unlikely. Thus, no potentially significant effects to special status plants are anticipated.

4.1.3 Special-Status Wildlife Species

Eight special status wildlife species have potential to occur in or adjacent the Project Study Area, including two federal listed species: marbled murrelet, and California red-legged frog. In addition, the study area provides suitable nesting substrate for several migratory bird species protected under the MBTA. Many of these special status species are likely to occur only incidentally in the Project Study Area or in adjacent habitats. Potentially significant effects or the unlikelihood for such effects are described below.

Special Status Bats – Hoary Bat

One special status bat species may potentially roost solitarily in tree foliage within the Project Study Area between spring and fall; no suitable hibernacula is present. Other special status bats may potentially occur in woodland habitat outside the project footprint. No tree removal is proposed and the project footprint borders but is not in the woodlands on site. As such **the project is not likely to affect special status bats**.

San Francisco Dusky-Footed Woodrat

SFDW may potentially occur in scrub habitats to the south of the project study area. A minimum 25-foot setback is prescribed where woodrat nests are present. Due to prescribed setbacks greater than 25 feet from these areas, the **project is not likely to affect SFDW**.

Migratory Birds Protected Under MBTA – Including Golden Eagle, Marbled Murrelet, Long-Eared Owl, and Wrentit

The Project Study Area and surrounding habitats provide suitable nesting substrate (trees, shrubs, grasses) for many non-status migratory birds, as well as special status birds and raptors. Effects to nesting birds and raptors resulting in nest abandonment or direct mortality to chicks

or eggs is considered a significant effect under CEQA. Such effects can occur as a result vegetation removal, proximity to noise and/or visual disturbances during construction.

Given existing development on the site, it is not likely that the proposed project will result in any new effects to species that occur in this area. A small amount of foraging habitat would be affected but given availability of suitable foraging habitat in the immediate surrounding area, the project would not likely adversely affect foraging habitat for these species, if present.

Western pond turtle (WPT)

WPT may seek refuge near ponds during periods of high flow in downstream habitats during the winter season but are not likely to nest on the site due the absence of loose friable soils for egg laying and presence of cows which could trample nests. Because the proposed project will not result in any effects to pond habitat nor create any barriers to dispersal, the project is **not likely to affect WPT.**

California red-legged frog (CRLF)

Suitable aquatic non-breeding and dispersal habitat is present within the Project Study Area. The lack of emergent and/or submerged vegetation for egg attachment within either pond precludes breeding. CRLF may disperse from aquatic habitats downstream via headwater streams to utilize pond habitat during the summer months. However, the project study area is not within any viable dispersal corridor between these features. The proximity of activities to CRLF habitat may potentially deter dispersing adults or individuals foraging on the site. Incidental take (mortality, harassment, or harm) to CRLF if present would be considered a significant effect under CEQA. Avoidance measures are prescribed below to ensure **the project will not affect CRLF**.

4.2 Recommended Avoidance and Minimization Measures

The following avoidance and minimization measures are recommended to avoid and/or reduce potentially significant effects described in Section 4.1 to a less than significant level.

MM-1. Prescribed Setbacks to Potentially Jurisdictional Waters of the State

A minimum 50-foot setback from McCormick Creek and 30-foot setback from all other streams and their associated riparian habitat shall be maintained to ensure accidental discharge to streams and their associated riparian habitat is avoided. Prescribed stream setbacks are depicted in the attached figure (Appendix A, Figure 1). No work within these areas is currently proposed.

MM-2. Best Management Practices (BMPs) for Work Occurring Near Waterways

Implementation of BMPs such as silt fence or straw wattles shall be installed and maintained between the work area and adjacent waterways to prevent any contaminants from entering the waterway. Plastic monofilament netting (erosion control matting) rolled erosion control products, or similar material should not be used to ensure amphibian and reptile species do not

get trapped. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

MM-3. Exclusion Fencing
Temporary exclusion fence should be placed between the project footprint and sensitive vegetation communities to avoid potential effects during grading/vegetation removal activities.

MM-4. Nesting Bird and Raptor Surveys
If work is initiated between February 1 and August 31, a pre-construction nesting bird and raptor survey shall be performed in all areas within one quarter mile of proposed activities. If nests are found, an appropriately sized no-disturbance buffer should be placed around the nest at the direction of the qualified biologist conducting the survey. Buffers should remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated.

Nest buffers for special status species shall be set as follows:

- For golden eagle or marbled murrelet = one quarter mile
- For long eared-owl or other raptor species = 250 feet
- For wrentit and/or other songbird species = 25 to 50 feet

MM-5. Worker Environmental Awareness Program (WEAP)
Environmental awareness training should be provided to all construction crew prior to the start of work. Training will include a description of all biological resources that may be found on or near the Project site, the laws and regulations that protect those resources, the consequences of non-compliance with those laws and regulations, instructions for inspecting equipment each morning prior to activities, and a contact person if protected biological resources are discovered on the Project site.

MM-6. Pre-Construction Wildlife Surveys
A pre-construction survey for special status reptiles and amphibians is recommended within 48 hours of any ground disturbing activities within 300 feet of any aquatic (pond) or riparian habitat when water is present. Non-listed species if found, may be relocated to suitable habitat outside the Project Site. If CRLF is found, work shall be halted, and the USFWS and CDFW contacted. Work shall remain halted until authorized to resume by the project biologist.

MM-7. Biological Monitoring
If CRLF is observed during pre-construction surveys or at any time during construction, a biological monitor is recommended to be present until work in the affected area is completed.

MM-8. Work Windows
No work shall be performed within 300 feet of stock pond habitats during or within 24 hours of any rain event (greater than 0.5 inches) between February 1 and April 31 when frogs are most likely to utilize upland habitats. No work shall occur within 30 minutes of sunrise or sunset.

5.0 REFERENCES

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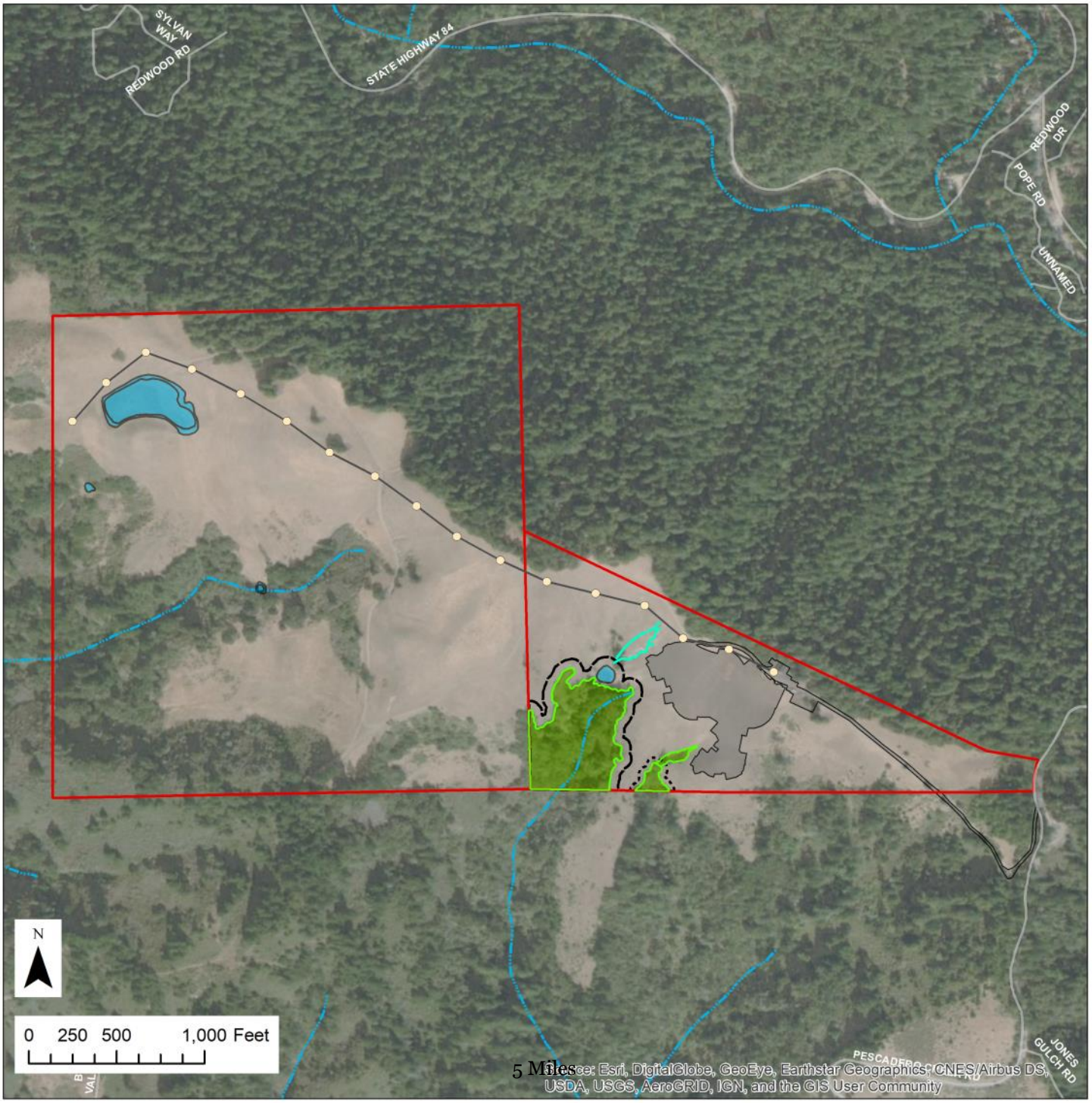
APPENDIX A

PROJECT FIGURES: SENSITIVE HABITATS MAP AND CNDDB DATABASE RESULTS

Figure 1: Sensitive Communities Within the Study Area
12429 Pescadero Creek Road, Loma Mar, CA

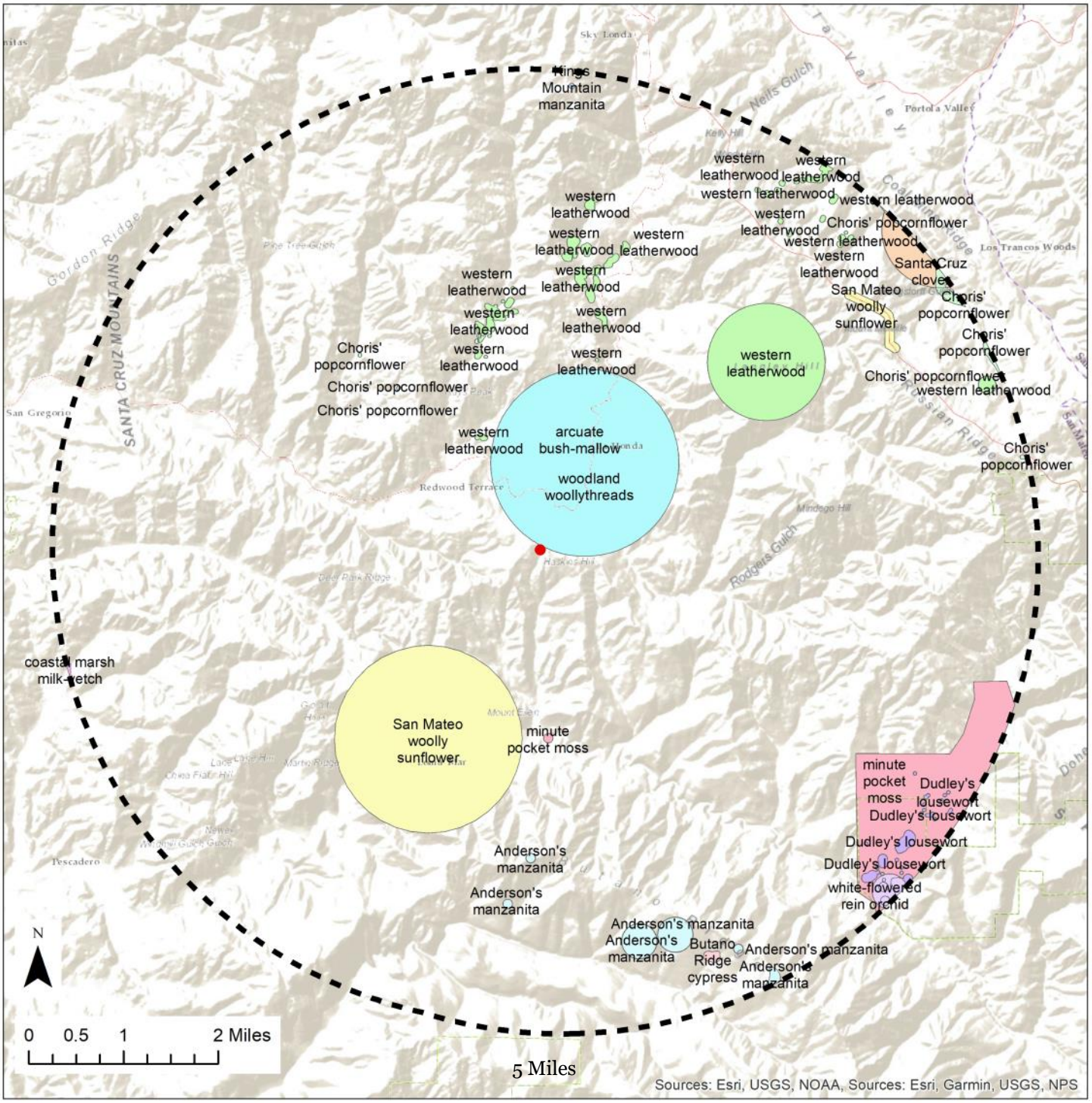


Date: 2-11-2021
Data: Sol Ecology Inc.
San Mateo Co., PHS/SPCA

Base: San Mateo Co
GIS: AG1831

SOL ECOLOGY
solecology.com

Figure 2: Special Status Plant Species within 5 Miles of the Project Site
12429 Pescadero Creek Road, Loma Mar, CA



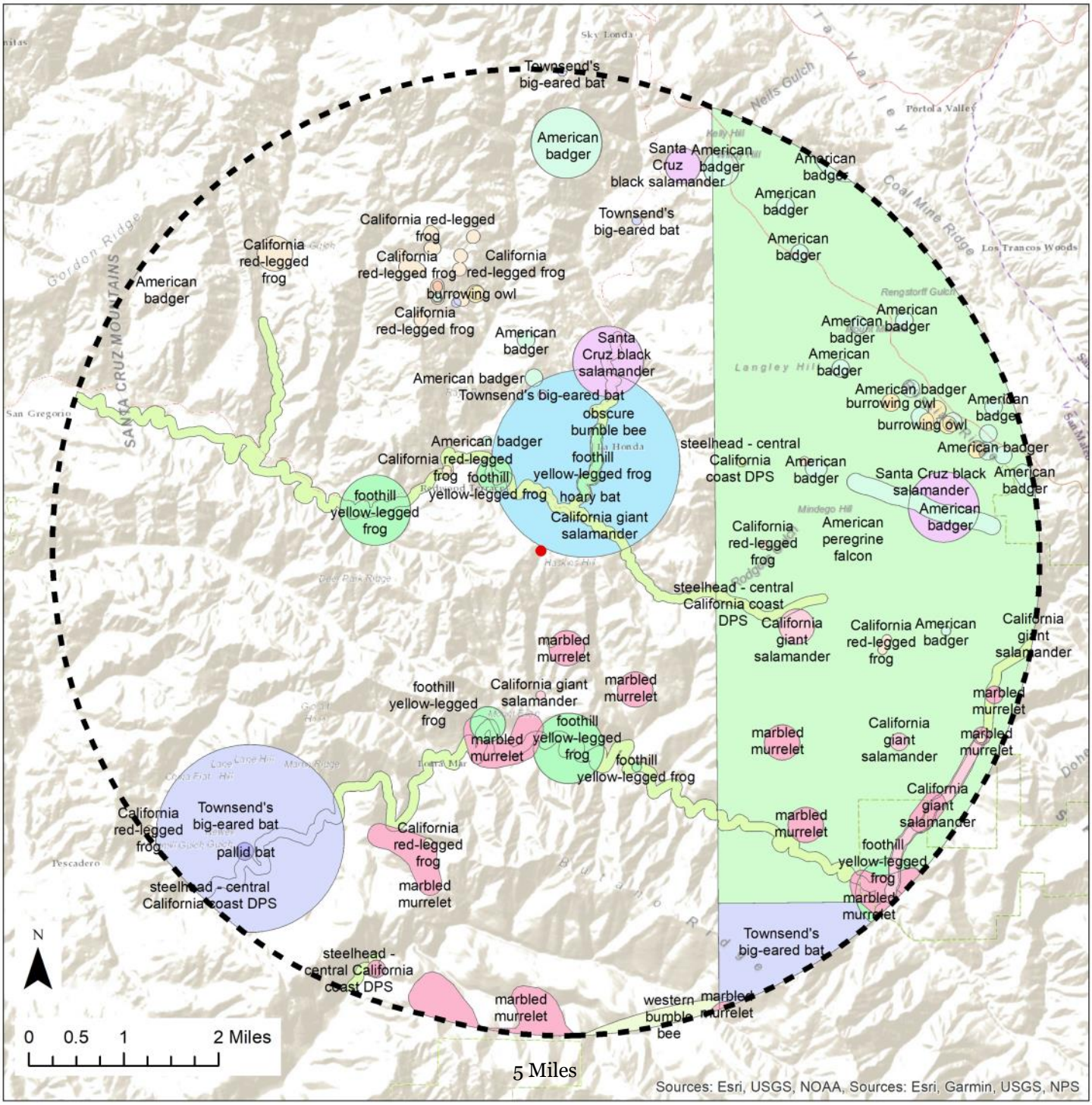
- Project Location
- 5 Mile Buffer
- Anderson's manzanita (5)
- Butano Ridge cypress (1)
- Choris' popcornflower (5)
- Dudley's lousewort (1)
- Kings Mountain manzanita (1)
- San Mateo woolly sunflower (2)
- Santa Cruz clover (1)
- arcuate bush-mallow (1)
- coastal marsh milk-vetch (1)
- minute pocket moss (2)
- western leatherwood (8)
- white-flowered rein orchid (1)
- woodland woollythreads (1)

Date: 11-11-2020
Data: Sol Ecology Inc., CDFW
San Mateo Co., PHS/SPCA

Base: ESRI
GIS: AJG

SOL ECOLOGY
solecology.com

Figure 3: Special Status Animal Species within 5 Miles of the Project Site
12429 Pescadero Creek Road, Loma Mar, CA



- Project Location
- 5 Mile Buffer
- American badger (15)
- American peregrine falcon (1)
- California giant salamander (6)
- California red-legged frog (11)
- Santa Cruz black salamander (3)
- Townsend's big-eared bat (6)
- burrowing owl (2)
- foothill yellow-legged frog (7)
- hoary bat (1)
- marbled murrelet (13)
- obscure bumble bee (1)
- pallid bat (1)
- steelhead - central California coast DPS (3)
- western bumble bee (1)
- western pond turtle (1)

Date: 11-11-2020
Data: Sol Ecology Inc., CDFW
San Mateo Co., PHS/SPCA

Base: ESRI
GIS: AJG

SOL ECOLOGY
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APPENDIX B

CNDDB, CNPS, AND IPAC SUMMARY TABLES

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Half Moon Bay (3712244) OR Woodside (3712243) OR Palo Alto (3712242) OR San Gregorio (3712234) OR La Honda (3712233) OR Mindego Hill (3712232) OR Pigeon Point (3712224) OR Franklin Point (3712223) OR Big Basin (3712222))
 AND Taxonomic Group IS (Dune OR Scrub OR Herbaceous OR Marsh OR Riparian OR Woodland OR Forest OR Alpine OR Inland Waters OR Marine OR Estuarine OR Riverine OR Palustrine OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes OR Fungi)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Acanthomintha duttonii San Mateo thorn-mint	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	170 600	5 S:3	0	1	0	1	1	0	1	2	2	0	1
Agrostis blasdalei Blasdale's bent grass	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCSC-UC Santa Cruz	25 35	62 S:3	0	0	0	0	0	3	1	2	3	0	0
Allium peninsulare var. franciscanum Franciscan onion	G5T2 S2	None None	Rare Plant Rank - 1B.2	170 670	25 S:11	2	2	1	0	0	6	2	9	11	0	0
Amsinckia lunaris bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley SB_UCSC-UC Santa Cruz		93 S:1	0	0	0	0	0	1	1	0	1	0	0
Anomobryum julaceum slender silver moss	G5? S2	None None	Rare Plant Rank - 4.2		13 S:1	0	0	0	0	0	1	0	1	1	0	0
Arctostaphylos andersonii Anderson's manzanita	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	525 2,400	64 S:26	2	8	4	3	0	9	8	18	26	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Arctostaphylos glutinosa Schreiber's manzanita	G1 S1	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz SB_USDA-US Dept of Agriculture	1,800 2,230	7 S:2	1	0	0	1	0	0	1	1	2	0	0
Arctostaphylos ohloneana Ohlone manzanita	G1 S1	None None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	1,700 1,700	4 S:1	0	0	0	0	0	1	0	1	1	0	0
Arctostaphylos regismontana Kings Mountain manzanita	G2 S2	None None	Rare Plant Rank - 1B.2	586 2,300	17 S:15	1	3	3	3	0	5	3	12	15	0	0
Arctostaphylos silvicola Bonny Doon manzanita	G1 S1	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	900 900	16 S:1	1	0	0	0	0	0	0	1	1	0	0
Astragalus pycnostachyus var. pycnostachyus coastal marsh milk-vetch	G2T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	10 500	25 S:10	0	5	1	0	1	3	4	6	9	1	0
Calyptridium parryi var. hesseae Santa Cruz Mountains pussypaws	G3G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	2,300 2,600	11 S:2	0	0	0	0	0	2	2	0	2	0	0
Centromadia parryi ssp. congdonii Congdon's tarplant	G3T1T2 S1S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	2 2	98 S:1	0	0	1	0	0	0	0	1	1	0	0
Chorizanthe pungens var. hartwegiana Ben Lomond spineflower	G2T1 S1	Endangered None	Rare Plant Rank - 1B.1	800 1,160	18 S:3	0	1	0	0	0	2	2	1	3	0	0

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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Cirsium andrewsii Franciscan thistle	G3 S3	None None	Rare Plant Rank - 1B.2	80 80	31 S:1	0	0	0	0	1	0	1	0	0	1	0
Cirsium fontinale var. fontinale fountain thistle	G2T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	150 600	5 S:4	0	0	3	0	1	0	1	3	3	1	0
Cirsium praeteriens lost thistle	GX SX	None None	Rare Plant Rank - 1A	50 50	1 S:1	0	0	0	0	1	0	1	0	0	1	0
Clarkia concinna ssp. automixa Santa Clara red ribbons	G5?T3 S3	None None	Rare Plant Rank - 4.3	1,500 2,750	20 S:2	0	0	0	0	0	2	2	0	2	0	0
Collinsia corymbosa round-headed Chinese-houses	G1 S1	None None	Rare Plant Rank - 1B.2		13 S:1	0	0	0	0	1	0	1	0	0	0	1
Collinsia multicolor San Francisco collinsia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	100 560	36 S:3	0	2	0	0	0	1	1	2	3	0	0
Dirca occidentalis western leatherwood	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	150 2,100	71 S:20	5	6	2	0	0	7	5	15	20	0	0
Eriophyllum latilobum San Mateo woolly sunflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	2,000 2,000	8 S:2	0	0	0	0	1	1	2	0	1	1	0
Eryngium aristulatum var. hooveri Hoover's button-celery	G5T1 S1	None None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	80 80	16 S:1	0	0	0	0	1	0	1	0	0	1	0
Eryngium jepsonii Jepson's coyote-thistle	G2 S2	None None	Rare Plant Rank - 1B.2	525 625	19 S:2	0	0	0	0	0	2	1	1	2	0	0
Erysimum ammophilum sand-loving wallflower	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CRES-San Diego Zoo CRES Native Gene Seed Bank SB_SBBG-Santa Barbara Botanic Garden	100 100	58 S:1	0	0	0	0	0	1	1	0	1	0	0

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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Fissidens pauperculus minute pocket moss	G3? S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	250 300	22 S:3	0	0	0	0	0	3	1	2	3	0	0
Fritillaria liliacea fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	33 720	82 S:5	0	4	0	0	0	1	2	3	5	0	0
Grimmia torenii Toren's grimmia	G2 S2	None None	Rare Plant Rank - 1B.3	1,970 2,325	13 S:4	0	0	0	0	0	4	0	4	4	0	0
Grimmia vaginulata vaginulate grimmia	G3 S1	None None	Rare Plant Rank - 1B.1	2,250 2,250	2 S:1	0	0	0	0	0	1	0	1	1	0	0
Hesperevax sparsiflora var. brevifolia short-leaved evax	G4T3 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	850 850	56 S:1	0	0	0	0	0	1	1	0	1	0	0
Hesperocyparis abramsiana var. abramsiana Santa Cruz cypress	G1T1 S1	Threatened Endangered	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	1,000 2,000	7 S:2	0	1	0	0	0	1	0	2	2	0	0
Hesperocyparis abramsiana var. butanoensis Butano Ridge cypress	G1T1 S1	Threatened Endangered	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	1,400 1,400	1 S:1	0	0	0	0	0	1	0	1	1	0	0
Hesperolinon congestum Marin western flax	G1 S1	Threatened Threatened	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	200 700	27 S:5	0	3	1	0	1	0	1	4	4	1	0
Horkelia cuneata var. sericea Kellogg's horkelia	G4T1? S1?	None None	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz USFS_S-Sensitive	600 600	58 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasthenia californica ssp. macrantha perennial goldfields	G3T2 S2	None None	Rare Plant Rank - 1B.2	25 50	59 S:5	0	2	1	2	0	0	0	5	5	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Legenere limosa legenere	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley	1,200 1,200	83 S:1	0	0	0	0	0	1	1	0	1	0	0
Leptosiphon rosaceus rose leptosiphon	G1 S1	None None	Rare Plant Rank - 1B.1	70 70	31 S:3	0	1	0	0	2	0	2	1	1	2	0
Lessingia arachnoidea Crystal Springs lessingia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	440 550	11 S:2	0	0	1	0	0	1	0	2	2	0	0
Limnanthes douglasii ssp. sulphurea Point Reyes meadowfoam	G4T1 S1	None Endangered	Rare Plant Rank - 1B.2	240 240	12 S:1	0	0	1	0	0	0	1	0	1	0	0
Malacothamnus arcuatus arcuate bush-mallow	G2Q S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	300 2,400	30 S:11	0	0	1	1	0	9	5	6	11	0	0
Microseris paludosa marsh microseris	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz	40 300	38 S:3	1	0	0	0	2	0	2	1	1	1	1
Monolopia gracilens woodland woollythreads	G3 S3	None None	Rare Plant Rank - 1B.2	400 1,850	68 S:13	0	1	0	0	1	11	7	6	12	1	0
Monterey Pine Forest Monterey Pine Forest	G1 S1.1	None None		400 400	11 S:1	0	0	0	0	0	1	1	0	1	0	0
N. Central Coast Calif. Roach/Stickleback/Steelhead Stream N. Central Coast Calif. Roach/Stickleback/Steelhead Stream	GNR SNR	None None		130 200	2 S:2	0	2	0	0	0	0	2	0	2	0	0
North Central Coast Drainage Sacramento Sucker/Roach River North Central Coast Drainage Sacramento Sucker/Roach River	GNR SNR	None None		400 400	4 S:1	0	1	0	0	0	0	1	0	1	0	0
North Central Coast Short-Run Coho Stream North Central Coast Short-Run Coho Stream	GNR SNR	None None		50 50	2 S:1	0	0	1	0	0	0	1	0	1	0	0

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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
North Central Coast Steelhead/Sculpin Stream North Central Coast Steelhead/Sculpin Stream	GNR SNR	None None		160 160	1 S:1	0	1	0	0	0	0	1	0	1	0	0
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	G3 S3.2	None None		10 10	53 S:3	0	1	0	0	0	2	3	0	3	0	0
Northern Interior Cypress Forest Northern Interior Cypress Forest	G2 S2.2	None None		1,000 2,100	22 S:3	0	0	0	0	0	3	3	0	3	0	0
Orthotrichum kellmanii Kellman's bristle moss	G1 S1	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	2,133 2,247	4 S:2	0	0	0	0	0	2	0	2	2	0	0
Pedicularis dudleyi Dudley's lousewort	G2 S2	None Rare	Rare Plant Rank - 1B.2 USFS_S-Sensitive	500 500	11 S:2	0	1	0	0	0	1	1	1	2	0	0
Penstemon rattanii var. kleei Santa Cruz Mountains beardtongue	G4T2 S2	None None	Rare Plant Rank - 1B.2	2,000 2,000	5 S:1	0	0	0	0	0	1	1	0	1	0	0
Pentachaeta bellidiflora white-rayed pentachaeta	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	520 2,000	14 S:5	1	0	0	0	2	2	4	1	3	2	0
Pinus radiata Monterey pine	G1 S1	None None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	400 400	5 S:1	1	0	0	0	0	0	0	1	1	0	0
Piperia candida white-flowered rein orchid	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	500 1,300	188 S:4	0	0	0	0	0	4	2	2	4	0	0
Plagiobothrys chorisianus var. chorisianus Choris' popcornflower	G3T1Q S1	None None	Rare Plant Rank - 1B.2 SB_UCSC-UC Santa Cruz	25 2,300	42 S:25	2	7	4	0	0	12	9	16	25	0	0
Plagiobothrys diffusus San Francisco popcornflower	G1Q S1	None Endangered	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz	160 160	17 S:1	0	0	1	0	0	0	1	0	1	0	0
Sacramento-San Joaquin Coastal Lagoon Sacramento-San Joaquin Coastal Lagoon	GNR SNR	None None		10 10	2 S:2	0	2	0	0	0	0	2	0	2	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Senecio aphanactis chaparral ragwort	G3 S2	None None	Rare Plant Rank - 2B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	640 1,200	98 S:2	0	0	0	0	0	2	2	0	2	0	0
Serpentine Bunchgrass Serpentine Bunchgrass	G2 S2.2	None None		720 5,800	22 S:2	1	0	0	0	0	1	2	0	2	0	0
Silene scouleri ssp. scouleri Scouler's catchfly	G5T4T5 S2S3	None None	Rare Plant Rank - 2B.2		23 S:1	0	0	0	0	0	1	0	1	1	0	0
Silene verecunda ssp. verecunda San Francisco campion	G5T1 S1	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	600 600	20 S:1	0	0	0	0	1	0	1	0	0	1	0
Stebbinsoseris decipiens Santa Cruz microseris	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	875 875	19 S:2	0	0	0	0	0	2	2	0	2	0	0
Stuckenia filiformis ssp. alpina slender-leaved pondweed	G5T5 S2S3	None None	Rare Plant Rank - 2B.2	50 50	21 S:2	0	0	0	0	0	2	2	0	2	0	0
Trifolium amoenum two-fork clover	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley SB_USDA-US Dept of Agriculture		26 S:1	0	0	0	0	0	1	1	0	1	0	0
Trifolium buckwestiorum Santa Cruz clover	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz SB_USDA-US Dept of Agriculture		64 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Trifolium polyodon	G1	None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_USDA-US Dept of Agriculture	870	21	0	0	0	0	0	1	1	0	1	0	0
Pacific Grove clover	S1	Rare		870	S:1											
Usnea longissima	G4	None	Rare Plant Rank - 4.2 BLM_S-Sensitive	590	206	0	0	0	0	2	0	2	0	0	1	1
Methuselah's beard lichen	S4	None		2,040	S:2											
Valley Needlegrass Grassland	G3	None		400	45	0	0	0	0	0	1	1	0	1	0	0
Valley Needlegrass Grassland	S3.1	None		400	S:1											
Valley Oak Woodland	G3	None		40	91	0	0	0	0	0	1	1	0	1	0	0
Valley Oak Woodland	S2.1	None		40	S:1											

Summary Table Report

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California Natural Diversity Database

Query Criteria: Quad IS (Half Moon Bay (3712244) OR Woodside (3712243) OR Palo Alto (3712242) OR San Gregorio (3712234) OR La Honda (3712233) OR Mindego Hill (3712232) OR Pigeon Point (3712224) OR Franklin Point (3712223) OR Big Basin (3712222))
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Ambystoma californiense California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	40 400	1231 S:5	0	1	0	0	3	1	3	2	2	1	2
Aneides niger Santa Cruz black salamander	G3 S3	None None	CDFW_SSC-Species of Special Concern	49 2,300	78 S:16	0	0	0	0	0	16	10	6	16	0	0
Antrozous pallidus pallid bat	G5 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	70 420	420 S:3	0	0	0	0	0	3	3	0	3	0	0
Ardea herodias great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	5 5	155 S:1	0	0	0	0	0	1	1	0	1	0	0
Asio otus long-eared owl	G5 S3?	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	2,000 2,000	48 S:1	0	0	0	0	0	1	1	0	1	0	0
Athene cunicularia burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	713 2,253	1989 S:3	0	0	0	0	0	3	0	3	3	0	0
Bombus caliginosus obscure bumble bee	G4? S1S2	None None	IUCN_VU-Vulnerable	40 500	181 S:5	0	0	0	0	0	5	5	0	5	0	0
Bombus crotchii Crotch bumble bee	G3G4 S1S2	None Candidate Endangered		100 100	276 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

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California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Bombus occidentalis western bumble bee	G2G3 S1	None Candidate Endangered	USFS_S-Sensitive XERCES_IM-Imperiled	15 400	279 S:8	0	0	0	0	0	8	8	0	8	0	0
Brachyramphus marmoratus marbled murrelet	G3G4 S1	Threatened Endangered	CDF_S-Sensitive IUCN_EN-Endangered NABCI_RWL-Red Watch List	200 1,800	110 S:36	0	1	0	0	0	35	19	17	36	0	0
Calicina minor Edgewood blind harvestman	G1 S1	None None		560 560	2 S:1	0	0	0	0	0	1	1	0	1	0	0
Charadrius alexandrinus nivosus western snowy plover	G3T3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	0 17	138 S:5	1	1	0	0	2	1	3	2	3	1	1
Corynorhinus townsendii Townsend's big-eared bat	G3G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	30 2,250	635 S:12	0	1	1	0	0	10	6	6	12	0	0
Coturnicops noveboracensis yellow rail	G4 S1S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	8 18	45 S:3	0	0	0	0	0	3	3	0	3	0	0
Cypseloides niger black swift	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_YWL-Yellow Watch List USFWS_BCC-Birds of Conservation Concern	540 540	46 S:1	0	0	0	0	0	1	1	0	1	0	0
Danaus plexippus pop. 1 monarch - California overwintering population	G4T2T3 S2S3	None None	USFS_S-Sensitive	40 200	383 S:9	0	4	2	0	1	2	8	1	8	1	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Dicamptodon ensatus California giant salamander	G3 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	80 2,400	234 S:30	1	1	0	0	0	28	14	16	30	0	0
Dipodomys venustus venustus Santa Cruz kangaroo rat	G4T1 S1	None None		20 600	29 S:3	0	0	0	0	3	0	3	0	0	3	0
Emys marmorata western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	21 949	1385 S:10	1	5	1	0	0	3	3	7	10	0	0
Eucyclogobius newberryi tidewater goby	G3 S3	Endangered None	AFS_EN-Endangered CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	15 20	127 S:3	0	2	0	0	0	1	3	0	3	0	0
Euphydryas editha bayensis Bay checkerspot butterfly	G5T1 S1	Threatened None	XERCES_CI-Critically Imperiled	500 640	30 S:3	0	1	0	0	2	0	2	1	1	1	1
Falco peregrinus anatum American peregrine falcon	G4T4 S3S4	Delisted Delisted	CDF_S-Sensitive CDFW_FP-Fully Protected USFWS_BCC-Birds of Conservation Concern	1,871 1,871	56 S:1	0	0	0	0	0	1	0	1	1	0	0
Geothlypis trichas sinuosa saltmarsh common yellowthroat	G5T3 S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	4 360	112 S:11	1	2	2	0	0	6	10	1	11	0	0
Haliaeetus leucocephalus bald eagle	G5 S3	Delisted Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	430 430	327 S:1	0	0	1	0	0	0	0	1	1	0	0
Hydrochara rickseckeri Ricksecker's water scavenger beetle	G2? S2?	None None		280 280	13 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasiurus cinereus hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority		238 S:6	0	0	0	0	0	6	6	0	6	0	0

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California Natural Diversity Database

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Laterallus jamaicensis coturniculus California black rail	G3G4T1 S1	None Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_NT-Near Threatened NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	5 5	303 S:1	0	1	0	0	0	0	0	1	1	0	0
Margaritifera falcata western pearlshell	G4G5 S1S2	None None		50 50	78 S:1	0	0	0	0	0	1	1	0	1	0	0
Melospiza melodia pusillula Alameda song sparrow	G5T2? S2S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	4 70	38 S:6	0	3	0	0	0	3	3	3	6	0	0
Microcina edgewoodensis Edgewood Park micro-blind harvestman	G1 S1	None None		600 600	1 S:1	0	0	0	0	0	1	1	0	1	0	0
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	G5T2T3 S2S3	None None	CDFW_SSC-Species of Special Concern	215 460	42 S:5	0	2	2	0	0	1	0	5	5	0	0
Oncorhynchus kisutch pop. 4 coho salmon - central California coast ESU	G4 S2?	Endangered Endangered	AFS_EN-Endangered	40 400	23 S:2	0	0	1	1	0	0	2	0	2	0	0
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	G5T2T3Q S2S3	Threatened None	AFS_TH-Threatened	40 1,200	44 S:9	0	2	0	0	0	7	6	3	9	0	0
Rallus obsoletus obsoletus California Ridgway's rail	G5T1 S1	Endangered Endangered	CDFW_FP-Fully Protected NABCI_RWL-Red Watch List	1 4	99 S:3	1	1	1	0	0	0	0	3	3	0	0
Rana boylii foothill yellow-legged frog	G3 S3	None Candidate Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive	80 1,654	2468 S:15	0	1	0	0	6	8	15	0	9	2	4
Rana draytonii California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	10 1,880	1543 S:66	13	19	10	1	2	21	21	45	64	1	1
Reithrodontomys raviventris salt-marsh harvest mouse	G1G2 S1S2	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	0 0	144 S:3	0	1	2	0	0	0	3	0	3	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Riparia riparia bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern		298 S:1	0	0	0	0	0	1	1	0	1	0	0
Sorex vagrans halicoetes salt-marsh wandering shrew	G5T1 S1	None None	CDFW_SSC-Species of Special Concern	2 2	12 S:1	0	0	0	0	0	1	1	0	1	0	0
Speyeria adiaste adiaste unsilvered fritillary	G1G2T1 S1	None None		1,600 2,300	2 S:2	0	1	0	0	0	1	2	0	2	0	0
Speyeria zerene myrtleae Myrtle's silverspot butterfly	G5T1 S1	Endangered None	XERCES_CI-Critically Imperiled	28 28	17 S:1	0	0	0	0	1	0	1	0	0	0	1
Spirinchus thaleichthys longfin smelt	G5 S1	Candidate Threatened		0 20	46 S:2	0	0	0	0	0	2	2	0	2	0	0
Sternula antillarum browni California least tern	G4T2T3Q S2	Endangered Endangered	CDFW_FP-Fully Protected NABCI_RWL-Red Watch List	1 1	75 S:1	0	0	0	0	1	0	1	0	0	0	1
Taricha rivularis red-bellied newt	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	1,800 2,000	136 S:2	0	0	0	0	0	2	0	2	2	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	30 2,542	592 S:26	0	0	0	0	0	26	3	23	26	0	0
Thamnophis sirtalis tetrataenia San Francisco gartersnake	G5T2Q S2	Endangered Endangered	CDFW_FP-Fully Protected	5 2,030	66 S:41	6	10	8	0	0	17	29	12	41	0	0
Tryonia imitator mimic tryonia (=California brackishwater snail)	G2 S2	None None	IUCN_DD-Data Deficient	3 40	39 S:2	0	1	0	0	0	1	1	1	2	0	0

CNPS California Native Plant Society

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

62 matches found. *Click on scientific name for details*

Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B], Found in Quads 3712244, 3712243, 3712242, 3712234, 3712233, 3712232, 3712224 3712223 and 3712222;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Acanthomintha duttonii	San Mateo thorn-mint	Lamiaceae	annual herb	Apr-Jun	1B.1	S1	G1
Agrostis blasdalei	Blasdale's bent grass	Poaceae	perennial rhizomatous herb	May-Jul	1B.2	S2	G2
Allium peninsulare var. franciscanum	Franciscan onion	Alliaceae	perennial bulbiferous herb	(Apr)May-Jun	1B.2	S2	G5T2
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	1B.2	S3	G3
Arctostaphylos andersonii	Anderson's manzanita	Ericaceae	perennial evergreen shrub	Nov-May	1B.2	S2	G2
Arctostaphylos glutinosa	Schreiber's manzanita	Ericaceae	perennial evergreen shrub	(Nov)Mar-Apr	1B.2	S1	G1
Arctostaphylos ohloneana	Ohlone manzanita	Ericaceae	evergreen shrub	Feb-Mar	1B.1	S1	G1
Arctostaphylos regismontana	Kings Mountain manzanita	Ericaceae	perennial evergreen shrub	Dec-Apr	1B.2	S2	G2
Arctostaphylos silvicola	Bonny Doon manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	1B.2	S1	G1
Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk-vetch	Fabaceae	perennial herb	(Apr)Jun-Oct	1B.2	S2	G2T2
Calyptridium parryi var. hesseae	Santa Cruz Mountains pussypaws	Montiaceae	annual herb	May-Aug	1B.1	S2	G3G4T2
Centromadia parryi ssp. congdonii	Congdon's tarplant	Asteraceae	annual herb	May-Oct(Nov)	1B.1	S1S2	G3T1T2
Chorizanthe pungens var. hartwegiana	Ben Lomond spineflower	Polygonaceae	annual herb	Apr-Jul	1B.1	S1	G2T1
Cirsium andrewsii	Franciscan thistle	Asteraceae	perennial herb	Mar-Jul	1B.2	S3	G3
Cirsium fontinale var. fontinale	Crystal Springs fountain thistle	Asteraceae	perennial herb	(Apr)May-Oct	1B.1	S1	G2T1

Cirsium praeteriens	lost thistle	Asteraceae	perennial herb	Jun-Jul	1A	SX	GX
Collinsia corymbosa	round-headed Chinese-houses	Plantaginaceae	annual herb	Apr-Jun	1B.2	S1	G1
Collinsia multicolor	San Francisco collinsia	Plantaginaceae	annual herb	(Feb)Mar-May	1B.2	S2	G2
Dirca occidentalis	western leatherwood	Thymelaeaceae	perennial deciduous shrub	Jan-Mar(Apr)	1B.2	S2	G2
Eriogonum nudum var. decurrens	Ben Lomond buckwheat	Polygonaceae	perennial herb	Jun-Oct	1B.1	S1	G5T1
Eriophyllum latilobum	San Mateo woolly sunflower	Asteraceae	perennial herb	May-Jun	1B.1	S1	G1
Eryngium aristulatum var. hooveri	Hoover's button-celery	Apiaceae	annual / perennial herb	(Jun)Jul(Aug)	1B.1	S1	G5T1
Eryngium jepsonii	Jepson's coyote thistle	Apiaceae	perennial herb	Apr-Aug	1B.2	S2?	G2?
Erysimum ammophilum	sand-loving wallflower	Brassicaceae	perennial herb	Feb-Jun	1B.2	S2	G2
Fissidens pauperculus	minute pocket moss	Fissidentaceae	moss		1B.2	S2	G3?
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2	G2
Grimmia torenii	Toren's grimmia	Grimmiaceae	moss		1B.3	S2	G2
Grimmia vaginulata	vaginulate grimmia	Grimmiaceae	moss		1B.1	S1	G2G3
Hesperevax sparsiflora var. brevifolia	short-leaved evax	Asteraceae	annual herb	Mar-Jun	1B.2	S2	G4T3
Hesperocyparis abramsiana var. abramsiana	Santa Cruz cypress	Cupressaceae	perennial evergreen tree		1B.2	S1	G1T1
Hesperocyparis abramsiana var. butanoensis	Butano Ridge cypress	Cupressaceae	perennial evergreen tree	Oct	1B.2	S1	G1T1
Hesperolinon congestum	Marin western flax	Linaceae	annual herb	Apr-Jul	1B.1	S1	G1
Horkelia cuneata var. sericea	Kellogg's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.1	S1?	G4T1?
Lasthenia californica ssp. macrantha	perennial goldfields	Asteraceae	perennial herb	Jan-Nov	1B.2	S2	G3T2
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
Leptosiphon croceus	coast yellow leptosiphon	Polemoniaceae	annual herb	Apr-Jun	1B.1	S1	G1
Leptosiphon rosaceus	rose leptosiphon	Polemoniaceae	annual herb	Apr-Jul	1B.1	S1	G1
Lessingia arachnoidea	Crystal Springs lessingia	Asteraceae	annual herb	Jul-Oct	1B.2	S2	G2
Limnanthes douglasii ssp. sulphurea	Point Reyes meadowfoam	Limnanthaceae	annual herb	Mar-May	1B.2	S1	G4T1
Malacothamnus arcuatus	arcuate bush-mallow	Malvaceae	perennial evergreen shrub	Apr-Sep	1B.2	S2	G2Q
Malacothamnus davidsonii	Davidson's bush-mallow	Malvaceae	perennial deciduous shrub	Jun-Jan	1B.2	S2	G2
Microseris paludosa	marsh microseris	Asteraceae	perennial herb	Apr-Jun(Jul)	1B.2	S2	G2
Monolopia gracilens	woodland woolythreads	Asteraceae	annual herb	(Feb)Mar-Jul	1B.2	S3	G3

Orthotrichum kellmanii	Kellman's bristle moss	Orthotrichaceae	moss	Jan-Feb	1B.2	S2	G2
Pedicularis dudleyi	Dudley's lousewort	Orobanchaceae	perennial herb	Apr-Jun	1B.2	S2	G2
Penstemon rattanii var. kleei	Santa Cruz Mountains beardtongue	Plantaginaceae	perennial herb	May-Jun	1B.2	S2	G4T2
Pentachaeta bellidiflora	white-rayed pentachaeta	Asteraceae	annual herb	Mar-May	1B.1	S1	G1
Pinus radiata	Monterey pine	Pinaceae	perennial evergreen tree		1B.1	S1	G1
Piperia candida	white-flowered rein orchid	Orchidaceae	perennial herb	(Mar)May-Sep	1B.2	S3	G3
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower	Boraginaceae	annual herb	Mar-Jun	1B.2	S1	G3T1Q
Plagiobothrys diffusus	San Francisco popcornflower	Boraginaceae	annual herb	Mar-Jun	1B.1	S1	G1Q
Polemonium carneum	Oregon polemonium	Polemoniaceae	perennial herb	Apr-Sep	2B.2	S2	G3G4
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	2B.2	S2	G3
Sidalcea hickmanii ssp. viridis	Marin checkerbloom	Malvaceae	perennial herb	May-Jun	1B.1	SH	G3TH
Silene scouleri ssp. scouleri	Scouler's catchfly	Caryophyllaceae	perennial herb	(Mar-May)Jun-Aug(Sep)	2B.2	S2S3	G5T4T5
Silene verecunda ssp. verecunda	San Francisco campion	Caryophyllaceae	perennial herb	(Feb)Mar-Jun(Aug)	1B.2	S1	G5T1
Stebbinsoseris decipiens	Santa Cruz microseris	Asteraceae	annual herb	Apr-May	1B.2	S2	G2
Stuckenia filiformis ssp. alpina	slender-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	May-Jul	2B.2	S2S3	G5T5
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	1B.1	S1	G1
Trifolium buckwestiorum	Santa Cruz clover	Fabaceae	annual herb	Apr-Oct	1B.1	S2	G2
Trifolium polyodon	Pacific Grove clover	Fabaceae	annual herb	Apr-Jun(Jul)	1B.1	S1	G1
Tropidocarpum capparideum	caper-fruited tropidocarpum	Brassicaceae	annual herb	Mar-Apr	1B.1	S1	G1

Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 28 April 2020].

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Mateo County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS

California Least Tern Sterna antillarum browni — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8104

Marbled Murrelet Brachyramphus marmoratus — Threatened
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/4467

Reptiles

NAME	STATUS

Green Sea Turtle Chelonia mydas — Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6199

San Francisco Garter Snake Thamnophis sirtalis tetrataenia — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5956

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/2891

Fishes

NAME	STATUS

Delta Smelt Hypomesus transpacificus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/321

Tidewater Goby Eucyclogobius newberryi — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/57

Insects

NAME	STATUS

San Bruno Elfin Butterfly Callophrys mossii bayensis There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3394	Endangered

Flowering Plants

NAME	STATUS
San Mateo Woolly Sunflower Eriophyllum latilobum No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7791	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
California Red-legged Frog Rana draytonii https://ecos.fws.gov/ecp/species/2891#crithab	Final
Marbled Murrelet Brachyramphus marmoratus https://ecos.fws.gov/ecp/species/4467#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php

- Nationwide conservation measures for birds
  http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — Breeds Apr 15 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

APPENDIX C

FIELD SURVEYOR QUALIFICATIONS

Biological Assessment and Wildlife Surveys

Dana Riggs, Principal Biologist for Sol Ecology received her Bachelor of Science degree in Earth Systems, Science and Policy at California State University of Monterey Bay in 2001. Prior to founding Sol Ecology, she was a principal biologist and head of the Wildlife and Fisheries Department at WRA, a mid-size environmental consulting firm in San Rafael, California. She has 20 years of experience directing a broad range of resource studies from planning level to post-construction including: biological habitat assessments and mapping, special status species surveys, corridor studies, site restoration and monitoring, federal and state regulatory permitting, local permitting, mitigation, and restoration planning for aquatic species, and NEPA and CEQA documentation for a variety of public and private sector clients. Dana has extensive experience working with species including California red-legged frog and California tiger salamander and has been approved by USFWS and CDFW to monitor for these species on projects throughout the state.

Wetland Delineation

Mark Kalnins, Senior Regulatory Specialist for Sol Ecology received a Bachelor of Science in Plant Biology from The Ohio State University in 1997 and a Master of Science in Environmental Science from Christopher Newport University-Virginia in 2000. He has worked as a professional wetland delineator, biologist, and regulatory permitting specialist in public, private, and non-profit sectors for over 17 years. Mark specializes in wetland delineation, assessments, and permitting, special status plant surveys, floristic inventories, and vegetation community mapping in the SF Bay Area and Northern California.

Biological Assessment and Botanical Surveys

Elspeth Mathau, Associate Biologist for Sol Ecology received an Honors Bachelor of Science degree in Environmental Studies, Biology and Psychology at the he University of Toronto in 2016, and a Master of Science in Ethnobotany at the University of Kent, in Canterbury UK with Training at Kew Royal Botanical Gardens in 2018. She started working in the environmental science education field in 2009, and has experience with plant restoration projects, floristic inventories. Her master's research was on ecological change and climate adaptation in the Moroccan High Atlas Mountains with indigenous communities. She has also worked with sustainable agriculture and STEM education non-profits focused on equity and inclusion programs.

APPENDIX D

SITE PHOTOGRAPHS

Photo 1. California annual grassland and disturbed communities on eastern parcel.

Photo 2. Existing development area including house, barn, staging area, and access road.

Photo 3. East facing view of the project study area including pole alignment area and development area. Erosional gully features in the grassland are not likely jurisdictional but will be avoided.

Photo 4. Larger stock pond and cattle on western parcel. Power poles will be placed 25 feet from pond OHWM.

Photo 5. Smaller stock pond located on eastern parcel, below the project study area

Photo 6. McCormick creek riparian vegetative community south east of the project study area.

APPENDIX E

RARE PLANT SURVEY REPORT

SOL ECOLOGY

P.O. Box 5214
Petaluma, CA 94955
(707) 241-7718
www.solecology.com

July 5, 2019

Ken White
Peninsula Humane Society & SPCA
1450 Rollins Road
Burlingame, CA 94010

Re: Special Status Plant Survey at the 12429 Pescadero Creek Road (APN 082-050-010 & 020)

Dear Mr. White,

This letter discusses the findings of a spring protocol-level special-status plant survey at 12429 Pescadero Creek Road (APN 082-050-010 & 020), Loma Mar, California (Project Area). In accordance with 2018 statewide protocols[1], floristic special-status plant surveys were performed on May 17, 2019 within the Project Area within the blooming period for the following target species: *Arctostaphylos* andersonii (Anderson's manzanita), *A. regismontana* (Kings Mountain manzanita), *Plagiobothrys chorisianus* (Choris' popcornflower), *Pedicularis dudleyi* (Dudley's lousewort), *Malacothamus arculatus* (arcuate bush-mallow), *Fissidens pauperculus* (minute pocket moss), *and Dirca occidentalis* (western leatherwood). Species with potential to occur in the Project Area are further described in the Preliminary Biological Reconnaissance Report for the PHS completed by Sol Ecology in January 2019.

Project Site Description

The proposed project at this location is to construct an animal sanctuary which consists of road expansion and re-surfacing to accommodate emergency vehicle access, cat and dog enclosures, and supporting structures (barns, vet clinics, visitor center, parking, on-site caretaker residences, storage, potential solar array) for the operation and maintenance of the site.

The Project Area is located on two parcels approximately one-half mile south the intersection of Highway 84 and Pescadero Creek Road, near the town of La Honda. The two parcels together are approximately 225 acres in size. A small area of development consisting of a roadway, residence and barn is present in the center of the Project Area bounded by dense oak woodland and redwood forest to the north and annual grassland and coastal scrub to the south. The site is located on south-facing slope along a ridgeline running east to west; bisecting the property is the headwaters to McCormick Creek (on the eastern parcel) and the headwaters of a tributary to Kingston Creek (on the western parcel). Elevations on the property range from 270 meters to 340 meters.

[1] CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. March 20, 2018.

Soil types on the Study Area include Lobitos loam which consists of moderately deep, well drained soils that formed on moderately hard sandstone and shale. This soil type is found in uplands on slopes between 5 to 50 percent and have moderately slow permeability and medium to rapid runoff. This soil type is mostly used for pasture and range. Typical vegetation includes annual grasses and forbs, with some brush including coyote brush, cascara berry, and poison oak. Along the ridgeline, at the edge of the Study Area, Hugo and Josephine loams are present. This soil type is found on very steep slopes and includes consists of deep, well drained soils formed in material weathered from sandstone, shale, schist, and conglomerate. It is primarily used for timber production and vegetation is typically mixed conifer-hardwood including Douglas-fir, coast redwood, tanoak, and madrone.

Methods

In the Preliminary Biological Assessment, a database query of the CNDDB[2] and the CNPS Electronic Inventory[3] was conducted within the La Honda and surrounding eight quadrangles to determine rare plants with potential to occur within the Project Area. A total of 13 occurrences for rare plants are recorded within five miles of the Project Area. Based on the Preliminary Biological Assessment, seven (7) rare plants were determined to have potential to occur on site and all are expected to be identifiable in May.

A rare plant survey was performed on May 17, 2019. Transect surveys were performed and the entire Project Area was traversed on foot to examine suitable habitat for the presence of special status plants known to occur in the vicinity of the Project Area. The survey followed the protocol described in the March 20, 2018 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. All rare plant populations and sensitive communities, if found, were mapped using handheld Global Positioning System equipment with sub-meter accuracy.

Adverse conditions from yearly weather patterns, as well as disease, drought, predation, fire, herbivory, or other disturbances may preclude presence in a given year. The timing of this survey was based on a determination of the blooming period for the seven (7) special status plant identified to have potential to occur on site in a normal (or average) rainfall year. No evidence of disease, drought, or predation was observed, although the presence of actively grazing cows on site may preclude detection of plants.

Field Surveyor Qualifications

Andrew Georgeades, Senior Ecologist at Sol Ecology received his Bachelor of Science degree in Environment Studies: Natural Resource Management and Conservation at San Francisco State University in 2005. Prior to working at Sol Ecology, Andrew worked as a natural resource

[2] **Error! Main Document Only.**California Department of Fish and Wildlife (CDFW). 2019. California Natural Diversity Database. Wildlife and Habitat Data Analysis Branch, Sacramento, CA. Accessed May 2019.
[3] California Native Plant Society (CNPS). 2019. Inventory of Rare and Endangered Plants (online edition, v8-02). Sacramento, California. Online at: http://rareplants.cnps.org/; most recently accessed: May 2019.

specialist for the Golden Gate National Recreation Area where he was responsible for monitoring native and rare plant populations and planning and supervising revegetation projects within the park. Andrew also previously worked for the California Native Plant Society as a vegetation project lead on the "Manual of California Vegetation, 2nd Ed." Publication. As a lead, he performed plant surveys, identified vegetation habitat types, landforms, environmental conditions, and plant species following the project protocol. Andrew currently is responsible for all floristic and focused plant surveys at Sol Ecology. He has extensive field experience identifying rare plant populations in the coastal zone. He maintains a current Scientific Collecting Permit with the California Department of Fish and Wildlife (CDFW).

Results and Discussion

Vegetation communities observed in the Project Area include annual grassland, montane hardwood, and coastal oak woodland. Sensitive communities include coast redwood forest (*Sequoia sempervirens* alliance) north of the Project Site, as well as potentially jurisdictional features. These communities are described in greater detail in the Preliminary Biological Assessment report under Section 3.2, Sensitive Vegetation Communities.

Based on a review of the literature and site assessments, the Project Area is potentially suitable for seven (7) rare plant species [as depicted in Table 1 of the Preliminary Biological Assessment prepared by Sol Ecology dated January 11, 2019]. A total of 114 plant species were observed in the project area during the May 17, 2019 site visit as shown in Attachment A, Table 1. No rare plant species were observed.

Given that no special status plants were observed during the survey in the Project Area or surrounding habitats, it is unlikely the project will result in any impacts to rare and/or endangered plant populations.

Should you have any questions or concerns, please feel free to contact me.

Sincerely,

Andrew Georgeades
Senior Ecologist/Botanist

Attachments: A – Table 1. Observed Species Table

Attachment A – Table 1. Observed Species Table

Scientific Name	Common Name	Life Form	Status	Family	Kennel Area	Road Expansion Area
Sambucus nigra	black elderberry	shrub	native	Adoxaceae	Y	N
Chloragalum pomeridianum	Soap plant	perennial herb	native	Agavaceae	N	Y
Toxicodendron diversilobum	Poison oak	vine, shrub	native	Anacardiaceae	Y	Y
Conium maculatum	poison hemlock	perennial herb	non-native	Apiaceae	Y	N
Heracleum maximum	Cow parsnip	perennial herb	native	Apiaceae	N	Y
Sanicula crassicaulis	Pacific sanicle	perennial herb	native	Apiaceae	N	Y
Achillea millefolium	common yarrow	perennial herb	native	Asteraceae	Y	Y
Anisocarpus madioides	woodland madia	perennial herb	native	Asteraceae	N	Y
Artemisia douglasiana	mugwort	perennial herb	native	Asteraceae	Y	Y
Baccharis pilularis	coyote brush	shrub	native	Asteraceae	Y	Y
Carduus pycnocephalus	Italian thistle	annual herb	non-native	Asteraceae	Y	Y
Cirsium vulgare	Bull thistle	perennial herb	non-native	Asteraceae	Y	Y
Helminthotheca echioides	Bristly ox tongue	annual or perennial herb	non-native	Asteraceae	Y	N
Hypochaeris radicata	Rough cats ear	perenninal herb	non-native	Asteraceae	Y	N
Lactuca serriola	prickly leaf lettuce	annual herb	non-native	Asteraceae	N	Y
Matricaria discoidea	pineapple weed	annual herb	native	Asteraceae	Y	N
Pseudognaphalium microcephalum	Wright's cudweed	perennial herb	native	Asteraceae	N	Y
Silybum marianum	Milk thistle	annual or perennial herb	non-native	Asteraceae	Y	N
Sonchus asper	spiny sow thistle	annual herb	non-native	Asteraceae	Y	Y
Symphyotrichum chilense	Chilean aster	perennial herb	native	Asteraceae	N	Y
Wyethia helenioides	Mules ears	perennial herb	native	Asteraceae	Y	N
Corylus cornuta	Beaked hazelnut	shrub	native	Betulaceae	Y	Y
Myosotis latifolia	Forget me not	perennial herb	non-native	Boraginaceae	N	Y
Brassica nigra	black mustard	annual herb	invasive non-native	Brassicaceae	Y	N

Scientific Name	Common Name	Life Form	Status	Family	Kennel Area	Road Expansion Area
Brassica rapa	common mustard	annual herb	non-native	Brassicaceae	Y	Y
Capsella bursa-pastoris	shepard's purse	annual herb	non-native	Brassicaceae	Y	N
Hirschfeldia incana	shortpod mustard	perennial herb	invasive non-native	Brassicaceae	Y	Y
Raphanus raphanistrum	Jointed charlock	annual or perennial herb	non-native	Brassicaceae	Y	N
Raphaus sativus	Wild radish	annual, biennial herb	non-native	Brassicaceae	Y	N
Lonicera hispidula	pink honeysuckle	vine or shrub	native	Caprifoliaceae	Y	Y
Silene gallica	windmill pink	annual herb	non-native	Caryophyllaceae	Y	N
Stellaria media	chickweed	annual herb	non-native	Caryophyllaceae	Y	Y
Convolvulus arvensis	field bind weed	perennial herb, vine	non-native	Convolvulaceae	Y	N
Marah fabacea	manroot	perennial herb or vine	native	Cucurbitaceae	Y	Y
Sequoia sempervirens	Coast redwood	tree	native	Cupressaceae	Y	N
Cyperus eragrostis	tall flatsedge	perennial grasslike herb	native	Cyperaceae	Y	N
Pteridium aquilinum	western bracken fern	fern	native	Dennstaedtiaceae	Y	Y
Dryopteris arguta	Wood fern	fern	native	Dryopteridaceae	Y	N
Polystichum munitum	Western sword fern	fern	native	Dryopteridaceae	Y	N
Arbutus menziesii	Madrono	tree	native	Ericaceae	N	Y
Euphorbia carachias	Albanian spurge	perennial herb	non-native	Euphorbiaceae	Y	N
Acmispon americanus	Spanish lotus	annual herb	native	Fabaceae	Y	Y
Acmispon glaber	deerweed	perennial herb	native	Fabaceae	Y	Y
Acmispon parviflorus	hill lotus	annual herb	native	Fabaceae	Y	N
Genista monspessulana	French broom	shrub	invasive non-native	Fabaceae	Y	N
Lathyrus vestitus	common Pacific pea	perennial herb	native	Fabaceae	Y	N
Lupinus bicolor	lupine	annual herb	native	Fabaceae	Y	N
Medicago polymorpha	bur clover	annual herb	non-native	Fabaceae	Y	N

Scientific Name	Common Name	Life Form	Status	Family	Kennel Area	Road Expansion Area
Melilotus indica	annual yellow sweetclover	annual herb	non-native	Fabaceae	Y	Y
Trifolium angustifolium	narrow leafed clover	annual herb	non-native	Fabaceae	N	Y
Trifolium dubium	shamrock	annual herb	non-native	Fabaceae	Y	Y
Trifolium hirtum	rose clover	annual herb	invasive non-native	Fabaceae	Y	Y
Trifolium subterraneum	Subterranean clover	annual herb	non-native	Fabaceae	Y	N
Vicia sativa ssp. nigra	smaller common vetch	annual herb or vine	non-native	Fabaceae	N	Y
Vicia sativa ssp. sativa	common vetch	annual herb or vine	non-native	Fabaceae	Y	Y
Notholithocarpus densiflorus	Tanoak	Tree, Shrub	native	Fagaceae	N	Y
Quercus agrifolia	coast live oak	tree	native	Fagaceae	Y	Y
Quercus spp.		tree	native	Fagaceae	Y	Y
Erodium botrys	big heron bill	annual herb	non-native	Geraniaceae	Y	N
Erodium cicutarium	coastal heron's bill	annual herb	invasive non-native	Geraniaceae	Y	N
Geranium dissectum	wild geranium	annual herb	non-native	Geraniaceae	Y	Y
Geranium molle	dovefoot geranium	annual or perennial herb	non-native	Geraniaceae	Y	N
Sisyrinchium bellum	Blue eyed grass	perennial herb	native	Iridaceae	Y	Y
Juncus bufonius	common toad rush	annual grasslike herb	native	Juncaceae	Y	N
Juncus effusus	common bog rush	annual grasslike herb	native	Juncaceae	Y	N
Juncus occidentalis	Western rush	Perennial herb	Native	Juncaceae	Y	N
Clinopodium douglasii	yerba buena	Perennial herb	native	Lamiaceae	N	Y
Stachys bullata	Hedge nettle	perennial herb	native	Lamiaceae	N	Y
Linum bienne	narrowleaf flax	Annual herb	non-native	Linaceae	Y	Y
Linum lewisii	Blue flax	Perennial herb	native	Linaceae	Y	Y
Malva nicaeensis	Bull mallow	annual herb	non-native	Malvaceae	Y	N

Scientific Name	Common Name	Life Form	Status	Family	Kennel Area	Road Expansion Area
Claytonia perfoliata	miner's lettuce	annual herb	native	Montiaceae	Y	N
Lysimachia arvensis	scarlet pimpernel	annual herb	non-native	Myrsinaceae	Y	Y
Taraxia ovata	Sun cups	perennial herb	native	Onagraceae	Y	N
Bellardia trixago	Meditteranean lineseed	annual herb	non-native	Orobanchaceae	Y	Y
Castilleja tenuiflora	Santa Catalina Indian paintbrush			Orobanchaceae	Y	N
Eschscholzia californica	California poppy	annual herb	native	Papaveraceae	Y	Y
Diplacus aurantiacus	Sticky monkeyflower	Shrub	native	Phyrmaceae	Y	Y
Pseudotsuga menziesii	Douglas fir	tree	native	Pinaceae	Y	N
Plantago coronopus	cut leaf plaintain	annual herb	non-native	Plantaginaceae	Y	N
Plantago lanceolata	English paintain	annual herb	non-native	Plantaginaceae	Y	Y
Avena barbata	slim oat	annual or perennial grass	non-native	Poaceae	Y	Y
Avena fatua	wild oat	annual grass	non-native	Poaceae	Y	Y
Brachypodium distachyon	Purple falsebrome	annual or perennial grass	non-native	Poaceae	Y	N
Briza maxima	Rattlesnake grass	annual grass	invasive non-native	Poaceae	Y	Y
Briza minor	little rattlesnake grass	annual grass	non-native	Poaceae	Y	Y
Bromus diandrus	ripgut brome	annual grass	invasive non-native	Poaceae	Y	Y
Bromus hordeaceus	soft chess	annual grass	invasive non-native	Poaceae	Y	Y
Festuca bromoides	Brome fescue	annual grass	non-native	Poaceae	Y	N
Festuca perennis	Italian rye grass	annual, perennial grass	invasive non-native	Poaceae	Y	N
Holchus lanatus	Velvetgrass	perennial grasslike herb	non-native	Poaceae	N	Y
Hordeum marinum	seaside barley	annual grass	non-native	Poaceae	Y	N

Scientific Name	Common Name	Life Form	Status	Family	Kennel Area	Road Expansion Area
Hordeum murinum	foxtail barley	annual grass	non-native	Poaceae	Y	Y
Phalaris aquatica	Harding grass	perennial grass	non-native	Poaceae	Y	Y
Poa annua	annual bluegrass	annual grass	non-native	Poaceae	Y	Y
Polypogon monspeliensis	rabbitsfoot grass	annual grass	non-native	Poaceae	Y	N
Stipa pulchra	purple needle grass	perennial grass	native	Poaceae	N	Y
Rumex crispus	curly dock	perennial herb	non-native	Polygonaceae	Y	Y
Pentagramma triangularis	Gold back fern	fern	native	Pteridaceae	Y	N
Ranunculus occidentalis	western buttercup	perennial herb	native	Ranunculaceae	Y	Y
Ceanothus thyrsiflorus	blueblossom	tree, shrub	native	Rhamnaceae	N	Y
Frangula californica	California coffeeberry	Shrub	native	Rhamnaceae	Y	Y
Fragaria vesca	Wild strawberry	perennial herb	native	Rosaceae	Y	Y
Heteromeles arbutifolia	Toyon	Shrub	native	Rosaceae	N	Y
Holodiscus discolor	Oceanspray	Shrub	native	Rosaceae	N	Y
Rubus ursinus	California blackberry	vine, shrub	native	Rosaceae	Y	Y
Galium aparine	common bedstraw	annual herb	native	Rubiaceae	Y	Y
Sherardia arvensis	Field madder	annual herb	non-native	Rubiaceae	Y	Y
Acer macrophyllum	Bigleaf maple	tree	native	Sapindaceae	N	Y
Scrophularia californica	California bee plant	perennial herb	native	Scrophulariaceae	Y	Y
Urtica dioica	Stinging nettle	perennial herb	native	Urticaceae	N	Y
Verbena lasiostachys	western vervain	perennial herb	native	Verbenaceae	Y	Y
	Liverwort				N	Y

SOL ECOLOGY

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Petaluma, CA 94955
(707) 241-7718
www.solecology.com

MEMORANDUM

TO: San Mateo County Planning Department

FROM: Dana Riggs, CEO

SUBJECT: Addendum to the February 23, 2021, Biological Resources Report for 12429 Pescadero Creek Road, San Mateo County, CA Preliminary Biological Resources

DATE: July 1, 2022

CC: Ken White, Peninsula Humane Society

The purpose of this memorandum to addend the Biological Resources Report (Report) that Sol Ecology prepared on February 23, 2021, for the proposed project located at 12429 Pescadero Creek Road, Loma Mar, in San Mateo County, California. The purpose of the project is to construct a humane society to house domestic animals that are not adopted and need long term housing.

Sol Ecology performed an assessment of the approximately 225-acre property (Project Study Area) to identify sensitive biological resources and potential permitting issues. Addended findings are as follows:

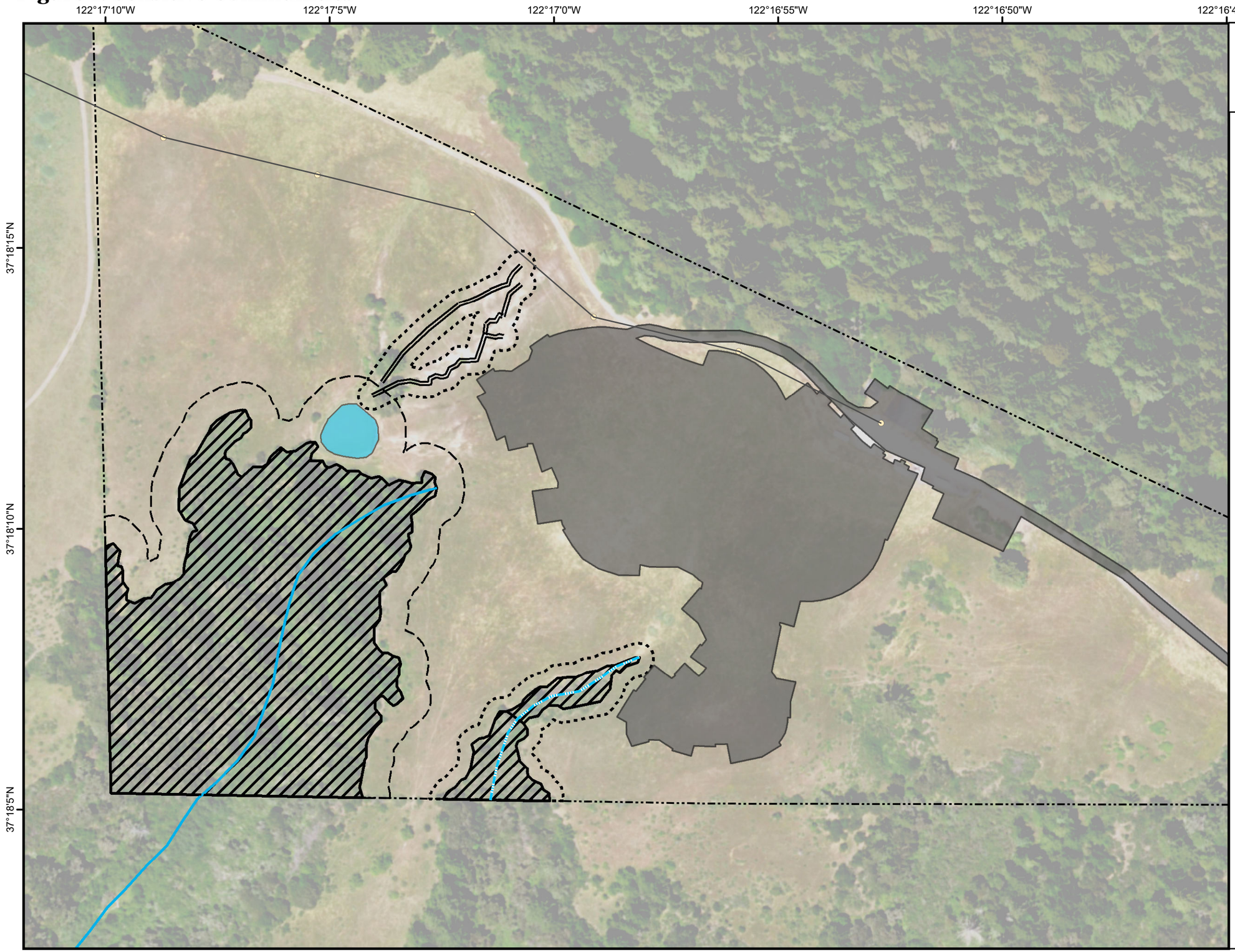
1. Several likely jurisdictional aquatic features were identified during the biological resources survey and are described in Section 3.1 of the Report. A discussion of impacts on page 11 suggests that accidental discharges near waterways would be considered significant. The purpose of this statement is to ensure that BMPs are employed to protect waterways. However, all Project related structures are at minimum, a distance of 25-feet from aquatic features, which is the minimum standard setback for wetlands and waterways per the Regional Water Quality Control Board. Because no work will occur within 25 feet of any waterway, no impacts are expected and no additional measures necessary.

2. Setbacks have been updated as shown on the attached figure (Figure 1) to 50 feet from perennial waters (including the man-made pond), and 25 feet from intermittent and ephemeral waters, including erosional gullies.

Consistent with our 2021 report, no work will occur within proximity to any jurisdictional feature including wetlands, waters, riparian, nor floodplain habitat and as such no regulatory permits are required.

Attachments (1): Figure 1. Sensitive Communities Update, July 2022

Figure 1. Sensitive Communities



12429 Pescadero Creek Rd.
Loma Mar, CA

Sensitive Communities Map

- Sensitive Riparian Habitat
- Intermittent Stream
- Perennial Stream
- Pond
- Erosional Gullies
- 25' Intermittent/Ephemeral Stream Setback
- 50' Perennial Stream Setback
- Proposed Project Footprint
- Project Study Area
- Proposed Powerline
- Proposed Pole

N

0 50 100 200
Feet

1 inch = 167 feet

Coordinate System: NAD 1983 UTM Zone 10N
Projection: Universal Transverse Mercator
Datum: North American 1983
Base: NAIP 2020

Date: 10-28-2021
Data: Sol Ecology Inc., San Mateo Co.
GIS: AG1861

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Petaluma, CA 94955
(707) 241-7718
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MEMORANDUM

TO: Summer Burlison, San Mateo County Planning Department

FROM: Dana Riggs, CEO

SUBJECT: PLN 2021-00316 - Addendum to the February 23, 2021, Biological Resources Report for 12429 Pescadero Creek Road, San Mateo County, California

DATE: October 13, 2022

CC: Jerry Griffin, Jordan Blum, and Jim Summers

The purpose of this Addendum is to provide additional information including a description of potential impacts and prescribed mitigation measures related to the removal of 7 trees on the project site not identified in the previously submitted February 23, 2021, Biological Resources Report prepared by Sol Ecology, Inc. for the proposed project located at 12429 Pescadero Creek Road (PLN 2021-00316).

Specifically, Section 4.1.3 of the February 23, 2021, report concludes that while special status bats may potentially occur in woodland habitat outside the project footprint, no tree removal is proposed and as such, the project is not likely to affect special status bats. Plans prepared after the biological report was submitted now show that 7 trees (6 oaks and 1 fir tree) will be removed within the project footprint. To address this discrepancy, the following revisions/additions shall be appended to the report:

Section 4.1.1 of the report should be revised [in red] as follows:

Sensitive communities present in the Study Area include redwood forest vegetation alliance, riparian habitat, and potential Waters of the State including two headwater streams, two stock ponds, and a small seep. An erosional gully located to the west of the project is not likely jurisdictional, but verification is needed to confirm; however, this feature will be avoided by the proposed project. The proposed project has been designed to avoid all sensitive communities on the site, including wetlands, riparian habitat, and species habitats (including movement corridors). While not a sensitive community, oak woodlands on the site are protected under the

Oak Woodland Protection Act which requires compensatory mitigation for the removal of any oak trees in conjunction with the project. Construction in proximity to intermittent streams may potentially result in accidental discharges of materials which in turn may affect water quality and/or contribute to erosional processes within headwater streams. Accidental discharges during construction would be considered a significant effect. The project will not conflict with the provisions of any habitat conservation or community conservation plan.

Section 4.1.3 of the report should be revised as follows:

Special Status Bats – Hoary Bat, Pallid Bat (and other cavity roosting bats)
~~One~~ Two special status bat species may potentially roost solitarily or colonially in oak woodland habitat in tree foliage, cavities, and/or under peeling bark within the Project Study Area. ~~between spring and fall, no suitable hibernacula is present. Other special status bats may potentially occur in woodland habitat outside the project footprint. No tree removal is proposed and the project footprint borders but is not in the woodlands on site. As such **the project is not likely to affect special status bats.**~~ The project would result in the removal of 6 oak trees (various species) and one fir that may provide suitable roost habitat for special status and/or common bats, including hoary bat (*Lasiurus cinereus*) and pallid bat (*Antrozous pallidus*). Removal of trees may be potentially significant if bats are present at the time of removal a maternity roost is present. Impacts resulting in direct mortality to roosting bats, and/or that results in removal of a maternity roost or hibernacula, are considered significant under CEQA.

Section 4.2 of the report should also be revised [in red] as follows:

MM.BIO-10. Tree Mitigation Plan. A tree removal plan and tree mitigation plan has been submitted; copies of the tree removal and mitigation plans are attached here. Mitigation for the loss of 7 trees (6 oaks and one fir) includes replacement at a 3:1 ratio. A mix of buckeye, redbud, and oaks (coast live, black, and valley oak) will be planted within the project footprint to offset the loss of the 7 trees to be removed.

MM.BIO-10. Special Status Bat Surveys. Prior to any tree removal, a qualified biologist shall conduct a habitat assessment for bats a minimum of 30 to 90 days prior to removal. The assessment should include a visual inspection of all potential roosting features (e.g., cavities, crevices, peeling bark, etc.). If suitable trees are found the following measures shall be initiated:

1. To the extent feasible, tree removal should be initiated between September 1 and October 15 to avoid maternity roosting bats if present and/or between March 1 and April 15 to avoid bats in hibernation. Trees may be removed during these two periods using the two-step removal process described below:

    a. On the first day, in the afternoon, under the direct supervision of a qualified biologist, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be avoided.

b. On the second day, the entire tree shall be removed and left overnight prior to chipping or hauling off the site to allow any bats to exit.

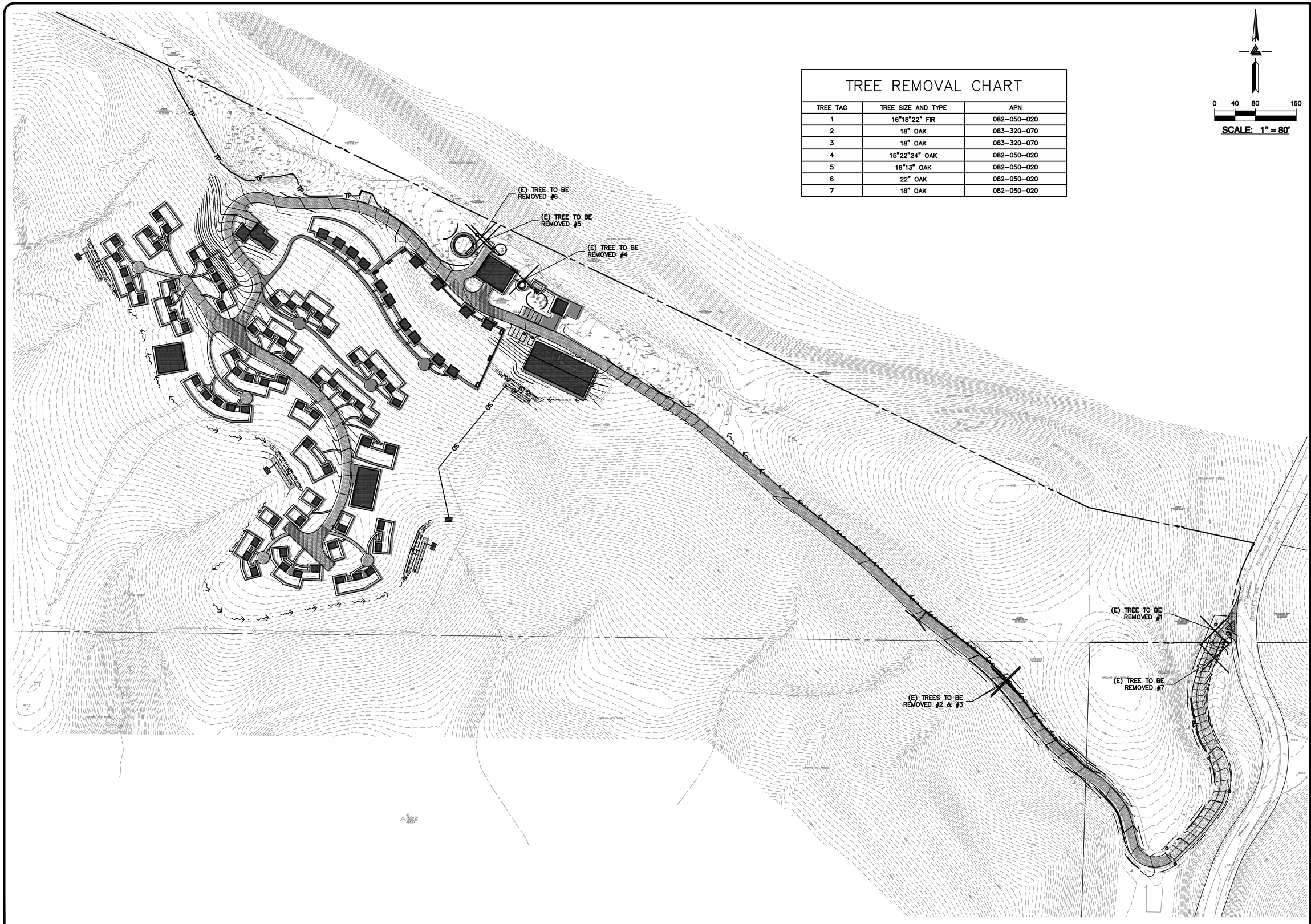
2. If tree removal must be performed outside the windows prescribed above and bat habitat is observed, an acoustic bat roost survey shall be performed by a qualified biologist between April 15 and September 1 to evaluate whether a maternity roost (solitary or colonial) is present. If a maternity roost is found, a no-disturbance buffer should be placed around the roost until September 1 when pups are likely to be weaned; the buffer shall be determined by the qualified biologist. Additionally, a bat mitigation and monitoring plan shall be prepared and submitted to CDFW for approval. No tree removal shall occur between October 15 and April 15 to avoid impacts to hibernating bats.

Implementation of the above measures will ensure potentially significant impacts to special status bats are mitigated to a less than significant level.

Attachments (2): Tree Removal Plan (C-2.0) and Tree Mitigation Plan (L7.0).

TREE REMOVAL CHART

TREE TAG	TREE SIZE AND TYPE	APN
1	16"18"22" FIR	082-050-020
2	18" OAK	083-320-070
3	18" OAK	083-320-070
4	15"22"24" OAK	082-050-020
5	16"13" OAK	082-050-020
6	22" OAK	082-050-020
7	18" OAK	082-050-020



0 40 80 160

SCALE: 1" = 80'

REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA No. C79555 CIVIL ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
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PENINSULA HUMANE SOCIETY ANIMAL SANCTUARY
12429 PESCADERO CREEK RD
LOMA MAR, CALIFORNIA
SAN MATEO COUNTY
APN: 082-050-010
082-050-020

TREE REMOVAL PLAN

–	–
2 USE PERMIT RESUBMITTAL 08/01/22	TB
1 USE PERMIT RESUBMITTAL 01/12/22	TB
REVISIONS	BY

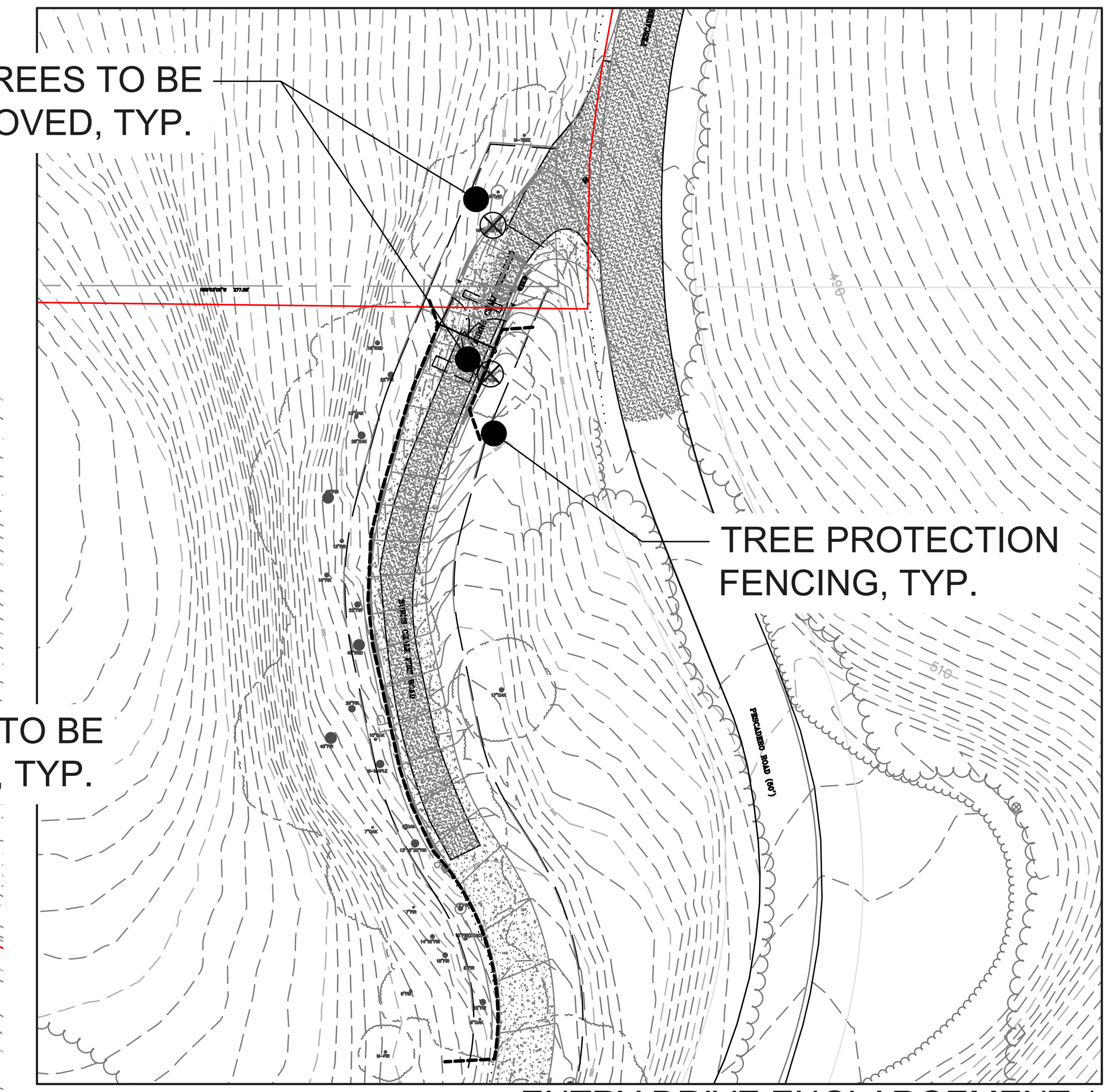
JOB NO:	2201144
DATE:	07/12/21
SCALE:	1" = 80'
DESIGN BY:	TB
CHECKED BY:	CA

SHEET NO:

C-2.0

03 OF 54 SHEETS

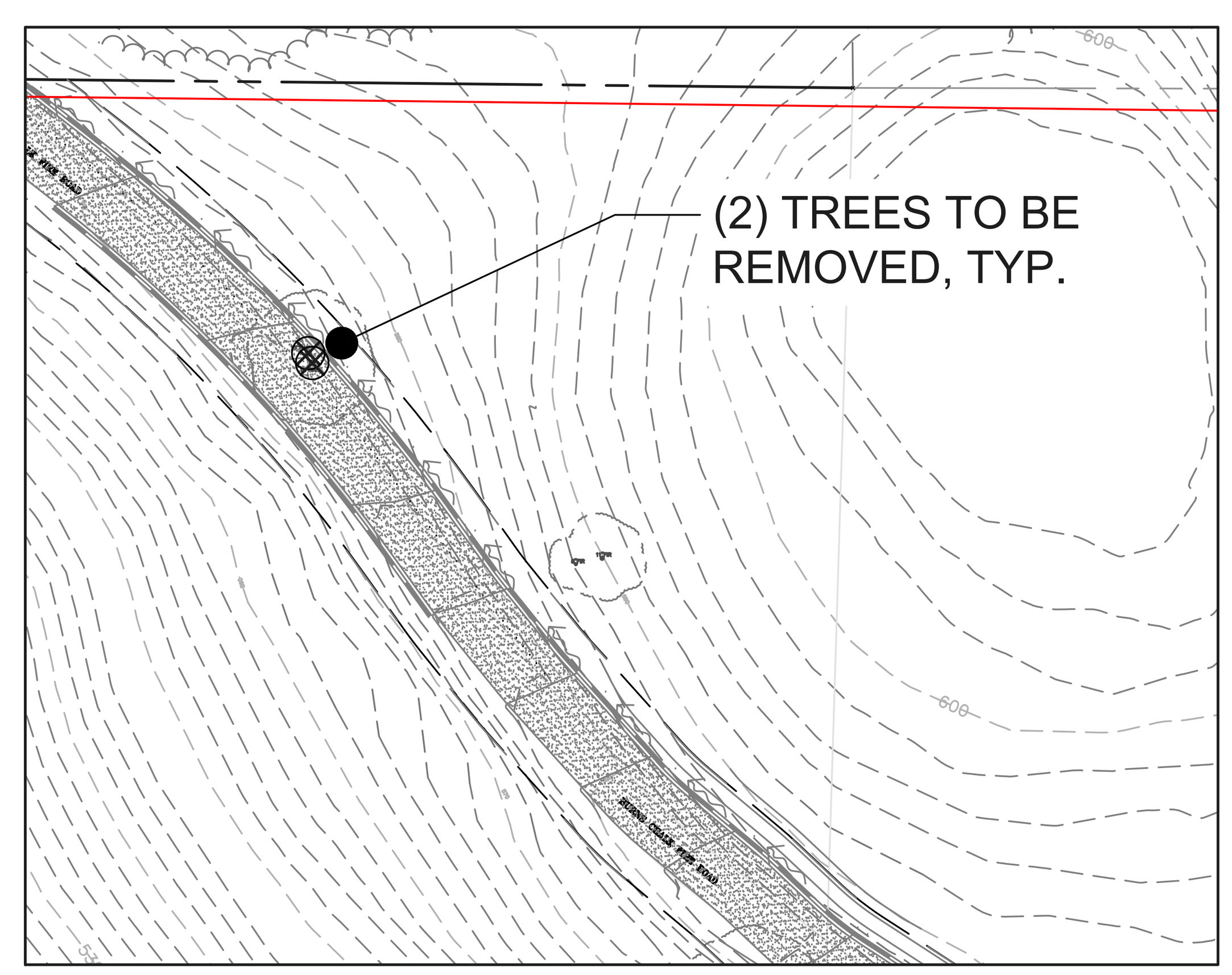
COUNTY OF SAN MATEO USE PERMIT SUBMITTAL



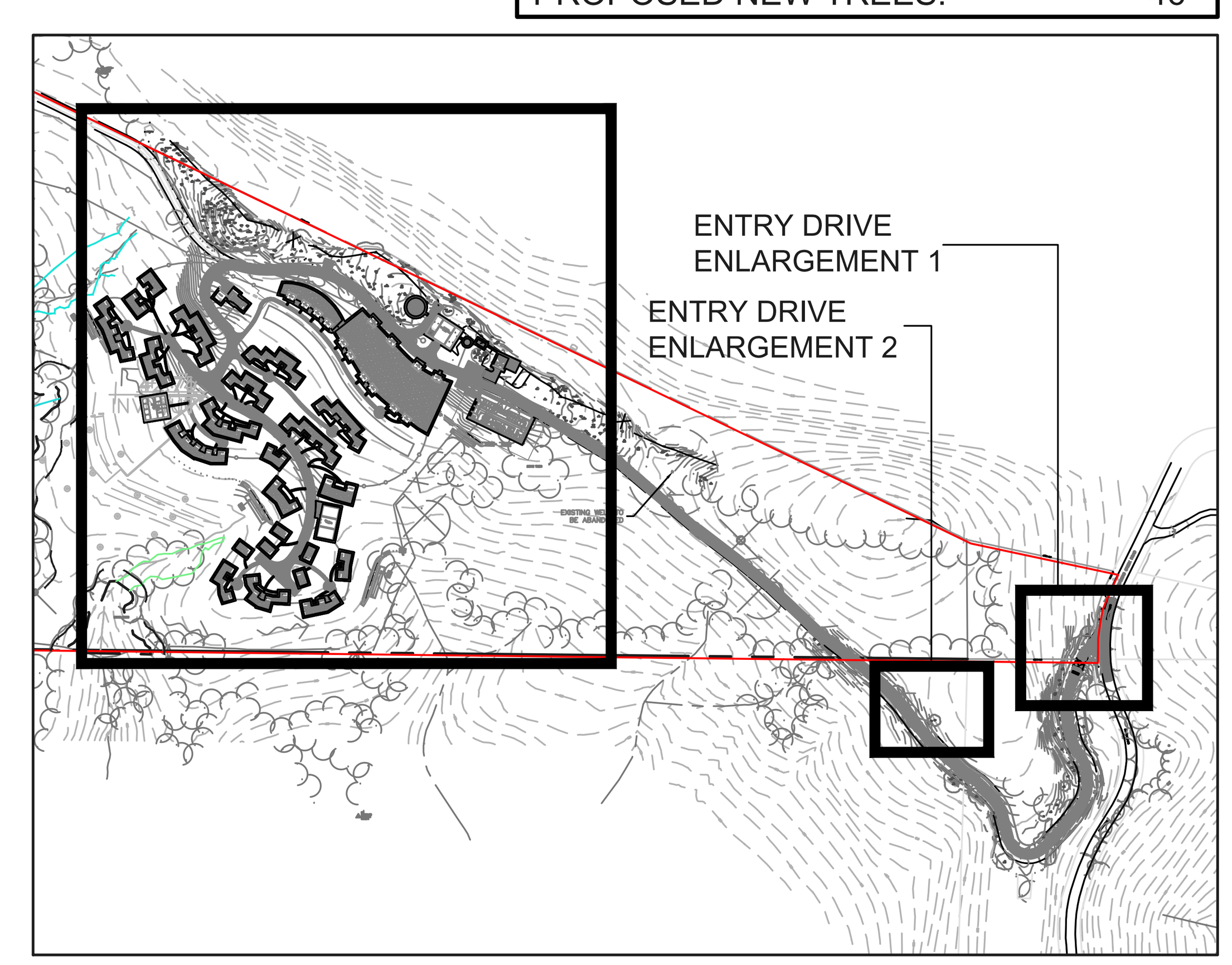
ENTRY DRIVE ENGLARGEMENT 1

TREE DISPOSITION SUMMARY

PROPOSED TREE REMOVALS:	7
PROPOSED NEW TREES:	46



ENTRY DRIVE ENGLARGEMENT 2



KEY PLAN
not to scale

PENINSULA HUMANE SOCIETY
ANIMAL SANCTUARY

Peninsula Humane Society & SPCA

KSH ARCHITECTS
KORTH SUNSERI HAGEY

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ISSUES AND REVISIONS

No. Date	Description
07.12.21	COUNTY OF SAN MATEO USE PERMIT SUBMITTAL
01.14.22	COUNTY OF SAN MATEO USE PERMIT RESUBMITTAL 1
08.01.22	COUNTY OF SAN MATEO USE PERMIT RESUBMITTAL 2

PROJECT NUMBER
18042.00

SHEET TITLE
TREE DISPOSITION PLAN

SCALE
Scale: 1" = 50'
0 25 50 100
North

SHEET NUMBER
L7.0