BIOLOGICAL RESOURCES ASSESSMENT

2281 Kiler Canyon Road,
Paso Robles, California
APN 026-371-003

Prepared for:
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"As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that I was present throughout the site visit(s) associated with this report."

Signature

04 September 2020
Date

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EXECUTIVE SUMMARY

This Biological Resources Assessment was prepared by Terra Verde Environmental Consulting, LLC (Terra Verde) at the request of Mr. Ivan Dudynsky (owner) for the development of two private residences on the property located at 2281 Kiler Canyon Road near the City of Paso Robles, San Luis Obispo County, California. The proposed project includes the development of a shared residential driveway, two primary residences, an attached studio, a photovoltaic solar panel array, underground utilities, and a septic leach field.

Terra Verde staff conducted two field surveys within the project site on May 04 and July 30, 2020. Surveys included an inventory of botanical and wildlife species observed, vegetation community classification, oak tree inventory, and an assessment of habitat, focusing on the potential for special-status species to occur. Terra Verde identified suitable habitat on site for 16 special-status botanical species. During appropriately timed spring and summer surveys, one special-status botanical species, Salinas milkvetch (*Astragalus macrodon*; California Rare Plant Rank 4.3), was observed on site. In addition, most of the site supports mixed oak woodland habitat.

No special-status wildlife species, sensitive natural communities, drainages, or other aquatic habitats were observed during field surveys. However, based on an assessment of habitat conditions, Terra Verde determined that 9 special-status wildlife species, as well as migratory nesting birds, have potential to occur on the project site.

As currently designed, direct impacts will occur to portions of the Salinas milkvetch population documented on site. In addition, several oak trees will be impacted and/or removed during project construction. Direct impacts to special-status wildlife could result from construction-related disturbances such as trampling or crushing from equipment. A series of avoidance, minimization, and mitigation measures have been recommended to reduce potential impacts to a less than significant level.

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1.0 INTRODUCTION

This Biological Resources Assessment (BRA) was prepared by Terra Verde Environmental Consulting, LLC (Terra Verde) at the request of Ivan Dudynsky (owner) for the proposed development of two private residences on the property located at 2281 Kiler Canyon Road near Paso Robles in San Luis Obispo County, California (APN 026-371-003) (see Appendix A – Figure 1: Project Vicinity).

The proposed project includes the phased development of two primary residences, driveway, a photovoltaic solar array, and installation of utility lines. The first phase will include development of a 1,198-square-foot (ft^2) primary residence with a 1,698-ft^2 attached studio, 2,593-ft^2 of exterior use area, and an 80-ft^2 outdoor pool. The second residence will be 4,646-ft^2 with 2,320-ft^2 of exterior use area, a 385-ft^2 outdoor pool, and spa. The driveway will be 16 feet wide and connect the two residences to Kiler Canyon Road. The project also includes the installation of underground utilities and a septic leach field.

1.1 Purpose of the Biological Resources Assessment

The purpose of this BRA is to identify sensitive biological resources that occur, or have potential to occur, within the proposed project site and surrounding areas. A sensitive resource is defined here as one that is of management concern to local, county, state, and/or federal resource agencies. Recommended avoidance, minimization, and mitigation measures are in Section 4.2; these measures are recommended to avoid and/or minimize any potential impacts to sensitive biological resources to the extent feasible. As necessary, this BRA may be used to support the County's environmental review process and future project permitting.

1.2 Existing Conditions

The project site is located within the Templeton U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle. It is situated in the southeastern foothills of the Santa Lucia Mountain Range in the Upper Salinas River Valley. The site is located approximately two miles west of Highway 101 and the Salinas River. Topography on site is steep, sloping up from Kiler Canyon Road toward a u-shaped ridgeline that divides the property. Elevation ranges from approximately 1,000 to 1,170 feet (304 to 356 meters). The site is undeveloped, and primarily vegetated in mixed oak woodland. No drainages or aquatic habitat was identified on site. There is a water tank on the ridge near the western boundary of the property and a capped well to the east of the tank. There are no access roads within the project site. The surrounding landscape consists of mostly agricultural land with occasional rural residential developments and fragmented patches of intact native habitat (see Appendix A – Figure 2: Survey Area).

2.0 METHODOLOGY

Prior to conducting field surveys, Terra Verde staff reviewed relevant literature and scientific databases pertaining to sensitive resources known to occur in the project vicinity, which included the following:

- Aerial photographs (Google Earth 1994 – 2020) and preliminary development site plans
- USGS Templeton 7.5-minute topographic quadrangle maps (USGS 2020)
- Online Soil Survey of San Luis Obispo County, California (Natural Resources Conservation Service [NRCS] 2020)
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) list of state and federally listed special-status species documented within the Templeton 7.5-minute quadrangle and the surrounding eight quadrangles (Adelaida, Atascadero, Creston, Estrella, Morro Bay North, Paso Robles, Santa Margarita, and York Mountain) (CDFW 2020)
- CNDDB map of special-status species that have been documented within a 5-mile radius of the project site (CDFW 2020) (see Appendix A – Figure 3A: 5-mile CNDDB – Botanical and Figure 3B: 5-mile CNDDB – Wildlife)
- Consortium of California Herbaria (CCH) online database of plant collections (CCH 2020)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants for the California Valley 7.5-minute quadrangle and the surrounding eight quadrangles (CNPS 2020a)
- United States Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2020a)
- USFWS National Wetland Inventory map (USFWS 2020b)

A list of regionally occurring, special-status species was compiled based on records reported in the scientific database queries (see Appendix B – Regionally Occurring Special-status Species Table). This list was used to inform the field survey efforts and determine appropriate survey periods for special-status plant species with the potential to occur on the site.

Following the review of literature and scientific databases, Terra Verde botanist Kristen Nelson and biologist Patrick Scott completed a field survey of the property on May 04, 2020. The survey consisted of a habitat assessment and vegetation community classification, botanical and wildlife species inventory, analysis of the potential for special-status botanical and wildlife species to occur on site, and an inventory of mature oak trees located within 50 feet of proposed development limits. A follow-up survey was completed by Ms. Nelson and Terra Verde biologist Sara Snyder on July 30, 2020, which focused on oak tree mapping and identification of sensitive resources along the proposed utility trench lines. The total survey area included the entire area of proposed development and an approximately 200-foot buffer on all sides where access was feasible, as well as a visual scan of the surrounding habitat features (see Appendix A – Figure 2). A summary of field surveys completed on site is provided in Table 1.

Table 1. Summary of Field Surveys

Date	Survey Type	Personnel	Survey Area
05/04/20	Botanical and wildlife inventory, habitat assessment, oak tree inventory	Kristen Nelson Patrick Scott	Development footprint and 100-foot buffer
07/30/20	Botanical and wildlife inventory, habitat assessment, oak tree inventory	Kristen Nelson Sara Snyder	Underground utility trenching limits and 50-foot buffer

Surveys were conducted on foot to ensure complete visual coverage of the survey area. During each survey, all botanical and wildlife species observed, including those detected by indirect sign (i.e., tracks, scat, skeletal remains, dens, burrows, or vocalizations) were documented (see Appendix C - Botanical and Wildlife Species Observed).

Botanical species identifications and taxonomic nomenclature followed *The Jepson Manual: Vascular Plants of California,* 2nd edition (Baldwin et al. 2012), as well as taxonomic updates provided in the Jepson eFlora (Jepson Flora Project 2020). Vegetation communities and land cover types were characterized, and natural communities were classified using the second edition of *A Manual of California Vegetation* (MCV) classification system (Sawyer et al. 2009) as well as updates in the MCV Online (CNPS 2020b). MCV vegetation community classifications were also compared to community descriptions for CDFW-designated sensitive natural communities.

The habitat requirements for each regionally occurring special-status species identified in the scientific database queries were analyzed and compared to the type and quality of habitats observed on site during the field survey. The potential for many species to occur within the project site was eliminated due to lack of suitable habitat, elevation, appropriate soils/substrate, and/or known distribution of the species. Special-status species for which suitable habitat was identified are discussed in-depth in the following section, and those determined to have no potential to occur based upon a lack of suitable habitat are not discussed (see Appendix B for a complete list of regionally occurring species that were evaluated).

2.1 Sufficiency of Biological Data

The field surveys and background research completed by Terra Verde are of sufficient detail and biological expertise to identify potentially occurring special-status wildlife species and identify habitats that have the potential to support sensitive resources and/or special-status species. The May 2020 survey was timed to coincide with the typical blooming and/or fruiting period for regionally occurring special-status botanical species for which suitable habitat exists on site.

Spring is an active period for wildlife of the region when reproductive activities, such as nest-building, increased foraging, or increased den excavation provide improved visibility and more frequent sign. However, migratory and transient wildlife species such as many birds and large mammals may only be seasonally present within the project area. Further, some species are

nocturnal and therefore may not have been detected during the surveys. As such, recommendations have been made for the avoidance of special-status wildlife species and resources deemed to have potential to occur, based on an assessment of habitat conditions on site.

3.0 RESULTS

This section provides a summary and analysis of the background research and combined field survey results. A description of soils, terrestrial and aquatic habitat types, direct and indirect observations of special-status species, and a discussion of the potential for special-status species to occur is provided. Any anticipated impacts to migration corridors and habitat connectivity are also considered.

3.1 Habitats and Aquatic Resources

The site supports of a diverse assemblage of mixed oak woodland, chaparral, and grassland habitats. Three soil units and three natural vegetation communities were documented within the survey area. Although suitable habitat for various common and special-status plants and wildlife species exists on the project site, the surrounding areas have been subjected to regular anthropogenic disturbances (i.e., farming). Historical and current land management practices have greatly reduced the potential for sensitive biological resources within the bounds of the project site.

3.1.1 Soils

The NRCS online soil report revealed three soil units within the survey area (see Appendix A – Figure 4: Soils). The primary characteristics of these soil units are described below.

Soil Unit 152: Linne-Calodo complex, 9 to 30 percent slopes
The soil type is derived from weathered calcareous sandstone and shale. It is a moderately deep, well-drained soil that occurs on moderately steep hills. It is composed mostly of shaly clay loam and clay loam and is found at elevations between 600 and 1,500 feet (182 to 457 meters).

Soil Unit 153: Linne-Calodo complex, 30 to 50 percent slopes
The soil type has the same characteristics as Soil Unit 152, except that it occurs on steeper slopes.

Soil Unit 175: Nacimiento silty clay loam, 9 to 30 percent slopes
The soil type is derived from weathered calcareous sandstone and shale. It is a moderately deep, well-drained soil that occurs on rolling to hilly landscapes. It is composed mostly of silty clay loam and is found at elevations between 600 and 1,500 feet (182 to 457 meters).

3.1.2 Hydrologic Features

No drainages or aquatic habitat was identified within the survey area.

3.1.3 Vegetation Communities

A total of 109 vascular plant taxa were identified in the survey area, of which 27 (25 percent) are non-native and 82 (75 percent) are native. Vegetation communities were assessed and classified based on vegetation composition, structure, and density. The property totals approximately 13 acres, most of which consists of intact mixed oak woodland, with patches of buckbrush chaparral and annual grassland (see Appendix A – Figure 5: Vegetation Communities and Sensitive Resources; see Appendix D – Representative Site Photographs). Natural vegetation communities observed within the survey area are described in detail below.

Mixed Oak Forest and Woodland (10.4 acres)

Most of the site supports a dense oak woodland dominated by blue oak (*Quercus douglasii*), with coast live oak (*Q. agrifolia*), interior live oak (*Q. wislizeni*), *and* foothill pine (*Pinus sabiniana*) co-dominating in a mixed tree canopy. Valley oak (*Q. lobata*) is also present at low cover. The understory is mostly open and herbaceous, dominated by annual grasses with occasional dense patches of Italian thistle (*Carduus pycnocephalus*). Western poison oak (*Toxicodendron diversilobum*) and creeping snowberry (*Symphoricarpos mollis*) form patchy shrub cover in the understory. This community also intergrades with areas of chaparral habitat on site.

This species composition was used in determining the community classification, which most closely corresponds with the *Quercus* (*agrifolia, douglasii, garryana, kelloggii, lobata, wislizeni*) Forest and Woodland Alliance (mixed oak forest and woodland) in the MCV classification system. This habitat occurs in valleys and on gentle to steep slopes with moderately deep soils at elevations between 820 and 6,560 feet (250 and 2,000 meters). This community provides valuable habitat for nesting birds, large and small mammals, reptiles, and other wildlife.

Buckbrush Chaparral (0.62 acre)

A swath of dense buckbrush (*Ceanothus cuneatus* var. *cuneatus*)-dominated chaparral borders the southern edge of the mixed oak woodland on site. The shrub canopy is co-dominated by big berry manzanita (*Arctostaphylos glauca*) and toyon (*Heteromeles arbutifolia*), with western poison oak and herbaceous species forming a sparse understory.

This species composition was used in determining the community classification, which most closely corresponds with the *Ceanothus cuneatus* Shrubland Alliance (buckbrush chaparral) in the MCV classification system. This habitat typically occurs on ridges and upper slopes in shallow, rocky, and well-drained soils at elevations below 5,900 feet (1,800 meters). This community provides valuable habitat for nesting birds, small mammals, reptiles, and other wildlife.

Wild Oats and Annual Brome Grasslands (3.6 acres)

The southwestern corner of the site and openings in the mixed oak woodland support annual grassland habitat dominated by ripgut grass (*Bromus diandrus*), wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), and native and native forbs including purple owl's clover (*Castilleja exserta*), hairy vetch (*Vicia villosa*), and yellow star-thistle (*Centaurea solstitialis*). In addition, Salinas milkvetch (*Astragalus macrodon*), a special-status species with a California Rare Plant Rank (CRPR) of 4.3, was documented in association with this community throughout the site (see Appendix E - California Natural Diversity Database Field Survey Forms).

This species composition was used in determining the community classification, which most closely corresponds with the *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance (wild oats and annual brome grasslands) in the MCV classification system. This habitat occurs in foothills, waste places, rangelands, and openings in woodlands at elevations below 7,217 feet (2,200 meters). This community may provide habitat for nesting birds, small mammals, and other wildlife.

3.1.4 Wildlife

The terrestrial habitat observed within and adjacent to the project site provides suitable habitat for a variety of common and special-status wildlife species. In particular, mixed oak woodland and chaparral habitats provide suitable nesting opportunity for various raptor and passerine bird species. These habitats also provide cover for a variety of wildlife, as well as edible fruits. Grassland habitat observed within and adjacent to the project site may also provide suitable nesting habitat for ground nesting birds and foraging opportunities for transient or resident wildlife. Small mammals and lagomorphs associated with grasslands, shrublands, and oak woodlands provide prey for carnivore species.

During the surveys, staff observed black-tailed deer (*Odocoileus hemionus columbianus)*, Merriam's chipmunk (*Tamias merriami*), Botta's pocket gopher (*Thomomys bottae)*, western side-blotched lizard (*Uta stansburiana*), and numerous avian species. Scattered woodrat middens were also observed throughout the site.

3.2 Sensitive Resources

The results of the background research for the area surrounding the proposed project site indicated that 2 sensitive natural communities, 60 special-status botanical species, and 39 special-status wildlife species occur in the project region. The habitat requirements for each of these species were compared to the type and quality of habitat on site. This assessment narrowed the list of potentially occurring species to 16 special-status botanical species and 9 special-status wildlife species. A discussion of the sensitive resources deemed to have potential to occur on site is below.

3.2.1 Special-status Plant Species

Terra Verde determined that suitable habitat is present on site for 16 special-status botanical species. In addition to species listed on the federal and California Endangered Species Acts (ESAs), special-status botanical species are those that are assigned a California Rare Plant Rank (CRPR) by the California Native Plant Society (CNPS 2020c). Additionally, individual oak trees (*Quercus* spp.) and oak woodlands are considered a sensitive resource by the State of California and the County of San Luis Obispo.

The following paragraphs provide a description of the special-status plant species that have the potential to occur on site. However, field surveys were completed during the appropriate blooming period for these species, and only one was observed in the survey area: Salinas milkvetch. Appropriate avoidance, minimization, and mitigation measures are discussed in Section 4.2 for this species. No other special-status plant species are expected to be impacted as a result of proposed project activities.

Hoover's Bent Grass (*Agrostis hooveri*), CRPR 1B.2
Hoover's bent grass is a perennial grass that is endemic to the coastal ranges of San Luis Obispo County. This species occurs in dry, sandy soils in association with open chaparral and oak woodland communities. It has been documented at elevations under 1,968 feet (600 meters). The typical blooming period is from April to August (Jepson Flora Project 2020). Documented threats to this species include development, vegetation clearing, and competition from non-native plants (CNPS 2020a). According to CNDDB records (CDFW 2020), the nearest documented occurrence is approximately 5.5 miles northwest of the project site.

Salinas Milkvetch (*Astragalus macrodon*), CRPR 4.3
Salinas milkvetch is a perennial herb that is known to occur on the Inner and Outer South Coast Ranges. This species typically grows on eroded pale shales, sandstone soils, or serpentine alluvium in openings of chaparral, cismontane woodland, and valley and foothill grassland habitat at elevations between 656 and 5,085 feet (200 and 1,550 meters). The typical blooming period is from April to June (Jepson Flora Project 2020). According to CCH records (2020), the nearest documented occurrence is approximately 1.25 miles northwest of the project site. In addition, Salinas milkvetch was documented in openings of chaparral and woodland throughout the survey area during both the May and July surveys. Portions of this population will be impacted by the proposed development. As such, avoidance, minimization, and mitigation measures are provided in Section 4.2.

Dwarf Calycadenia (*Calycadenia villosa*), CRPR 1B.1
Dwarf calycadenia is an annual herb that is known to occur along the length of the Outer South Coast Ranges, from northern Monterey County to central Santa Barbara County. This species typically occurs in association with grassland and openings in foothill woodland on dry, rocky hills and ridges at elevations ranging from 820 to 2,788 feet (250 to 850 meters).

The typical blooming period is from May to September (Jepson Flora Project 2020). According to CNDDB records (CDFW 2020), the nearest documented occurrence is approximately six miles northwest of the project site.

San Luis Obispo Owl's-clover (*Castilleja densiflora* subsp. *obispoensis*), CRPR 1B.2
San Luis Obispo owl's-clover is an annual herb that is endemic to San Luis Obispo County. Specifically, it is known to occur mostly in coastal areas along the Outer South Coast Ranges from just south of Ragged Point to Avila Beach, with several populations occurring in the Irish Hills of west-central San Luis Obispo County. This species typically occurs in coastal grasslands at elevations below 1,312 feet (400 meters) and may be somewhat tolerant of disturbance. The typical blooming period is from March to June (Jepson Flora Project 2020). Documented threats to this species include development and grazing (CNPS 2019a). According to CNDDB records (CDFW 2020a), the nearest documented occurrence is approximately six miles northeast of the site.

Lemmon's Jewelflower (*Caulanthus lemmonii*), CRPR 1B.2
Lemmon's jewelflower is an annual herb that is endemic to California. It is known to occur throughout the Inner and Outer South Coast Ranges and along the western foothills of the San Joaquin Valley, with some populations extending east along the Transverse Ranges and into the northwest corner of the Mojave Desert. This species typically occurs in grassland, chaparral, and scrub communities at elevations ranging from 262 to 3,609 feet (80 to 1,100 meters). The typical blooming period is from March to May (Jepson Flora Project 2020). According to CNDDB records (CDFW 2020), the nearest documented occurrence is less than one mile northeast, and a second is located less than five miles northeast of the project site.

Douglas' spineflower (*Chorizanthe douglasii*), CRPR 4.3
Douglas' spineflower is an annual herb that occurs along the South Coast Ranges of Monterey, San Benito, and San Luis Obispo Counties. This species typically grows in open sandy or gravelly soil, and may be associated with openings of cismontane woodland, chaparral, coastal scrub, lower montane coniferous forest, or foothill grassland at elevations between 656 and5,249 feet (200 and 1,600 meters). The typical blooming period is April to July (Jepson Flora Project 2020). According to CCH records (2020), the nearest documented occurrences are more than 10 miles northeast and northwest of the project site.

Straight-awned spineflower (*Chorizanthe rectispina*), CRPR 1B.3
Straight-awned spineflower is an annual herb that is known to occur in few, disjunct populations throughout the Outer South Coast Ranges of Monterey and San Luis Obispo Counties. This species typically grows in open sandy or gravelly soil, and may be associated with openings of cismontane woodland, chaparral, and coastal scrub at elevations between 656 and 1,968 feet (200 and 600 meters). The typical blooming period is from May to July (Jepson eFlora Project 2020). According to CNDDB records (CDFW 2020), the nearest documented occurrence is more than 10 miles northwest of the project site.

Yellow-flowered Eriastrum (*Eriastrum luteum*), CRPR 1B.2
Yellow-flowered eriastrum is an annual herb that is endemic to the Inner and Outer South Coast Ranges of Monterey and San Luis Obispo Counties. This species typically occurs in rocky or gravelly soils on drying slopes in association with chaparral, broadleaf forest, and woodland communities. It is known to occur at elevations below 3,280 feet (1,000 meters). The typical blooming period is from May to June (Jepson eFlora Project 2020). Documented threats to this species include grazing, vehicles, and possibly development (CNPS 2020a). According to CNDDB records (CDFW 2020), the nearest documented occurrence is approximately 6.5 miles northwest of the project site.

San Benito Poppy (*Eschscholzia hypecoides*), CRPR 4.3
San Benito poppy is an annual herb that is known to occur throughout the Inner and Outer South Coast Ranges, with some occurrences extending into the adjacent portions of the Sacramento and San Joaquin Valleys. This species occurs in grassy openings of woodland and chaparral habitats at elevations between 656 and 5,249 feet (200 and 1,600 meters). The typical blooming period is from March to June (Jepson Flora Project 2020). According to CCH records (CDFW 2020), the nearest documented occurrence is approximately 1.25 miles north of the project site.

Ojai Fritillary (*Fritillaria ojaiensis*), CRPR 1B.2
Ojai fritillary is a perennial herb that is known to occur in the Outer South Coast Ranges and the western Transverse Ranges. It typically occurs on rocky slopes and in river basins associated with broadleaf forest, chaparral, woodland, and coniferous forest communities. This species is known to occur at elevations between 984 and 1,640 feet (300 and 500 meters). The typical blooming period is from February to May (Jepson Flora Project 2020). Documented threats to this species include road maintenance and recreational activities (CNPS 2020a). According to CNDDB records (CDFW 2020), the nearest documented occurrence is approximately 10 miles south of the project site.

Jones' Bush-mallow (*Malacothamnus jonesii), CRPR 4.3
Jones' bush-mallow is a shrub up to 3 meters tall that is known to occur in disjunct populations in the Inner North Coast Ranges and Outer South Coast Ranges. This species occurs in open chaparral and woodland habitat. It is known to occur at elevations ranging from 820 to 22,723 feet (250 to 830 meters). The typical blooming period may span from May to July (Jepson Flora Project 2020). According to CCH records (2020), several occurrences of this species are documented within one mile of the project site.

Carmel Valley Bush-mallow (*Malacothamnus palmeri* var. *involucratus), CRPR 1B.2
Carmel Valley bush-mallow is a shrub up to 2.5 meters tall that is known to occur in several disjunct populations along the immediate coast and the Inner South Coast Ranges of Monterey and San Luis Obispo Counties. This taxon typically occurs in valleys in association with chaparral, woodland, and scrub communities. It is known to occur at elevations ranging from 98 to 2,624 feet (30 to 800 meters). The typical blooming period spans from May to July

(Jepson Flora Project 2020). Documented threats include development (CNPS 2020a). According to CNDDB records (CDFW 2020), the nearest documented occurrence of this species is more than 10 miles north of the project site.

Santa Lucia Bush-mallow (*Malacothamnus palmeri* var. *palmeri*), CRPR 1B.2
Santa Lucia bush-mallow is a shrub up to 2.5 meters tall that is known to occur in several disjunct populations along the immediate coast and the Inner South Coast Ranges of Monterey and San Luis Obispo Counties. This taxon is typically in association with chaparral communities of interior valleys and foothills. It is found at elevations ranging from 98 to 2,624 feet (30 to 800 meters). The typical blooming period may span from May to July (Jepson Flora Project 2020). Documented threats to this species include altered fire regimes (CNPS 2020a). According to CNDDB records (CDFW 2020), the nearest documented occurrence is approximately 9.5 miles west of the project site.

Hooked Popcornflower (*Plagiobothrys uncinatus*), CRPR 1B.2
Hooked popcornflower is an annual herb that is known to occur in several populations along the Inner South Coast Ranges in Monterey and San Luis Obispo Counties. This species typically grows in rocky or sandy soil in association with chaparral, woodland, and grassland habitats. It is known to occur at elevations ranging from 984 to 1,968 feet (300 to 600 meters). The typical blooming period spans from April through May (Jepson Flora Project 2020). According to CNDDB records (CDFW 2020), the nearest documented occurrence is more than 10 miles northwest of the project site.

Chaparral ragwort (*Senecio aphanactis*), CRPR 2B.2
Chaparral ragwort is an annual herb that is known to occur in scattered populations along the Inner and Outer South Coast Ranges as well as the south coast from the Bay Area to Baja California. This species typically grows in dry, open, rocky areas and alkaline flats in association with chaparral, woodland, and coastal scrub habitats. It is known to occur at elevations ranging from 33 to 1,804 feet (10 to 550 meters). The typical blooming period may span from February through May (Jepson Flora Project 2020). Potential threats to this species include development (CNPS 2020a). According to CNDDB records (CDFW 2020), the nearest documented occurrence is more than 10 miles west of the project site.

San Gabriel ragwort (*Senecio astephanus*), CRPR 4.3
San Gabriel ragwort is a perennial herb that is known to occur in several disjunct populations along the coastal mountains from Monterey County to the southwestern corner of San Bernardino County. This species typically grows on steep, rocky slopes in association with chaparral, coastal scrub, and oak woodland habitats. It is known to occur at elevations ranging from 1,312 to 4,921 feet (400 to 1,500 meters). The typical blooming period for this species is from April to June (Jepson Flora Project 2020). According to CCH (2020), the nearest documented occurrence is approximately 7.5 miles west of the project site.

Native Oak Trees (*Quercus* spp.), *Protected under California Environmental Quality Act (CEQA) (Senate Bill 1334/Kuehl Bill and California Public Resources Code 21083.4)*

Impacts to or removal of mature oak trees (i.e., greater than five inches in diameter at breast height) or oak woodland habitat is evaluated under CEQA. As a CEQA Lead Agency, the County of San Luis Obispo currently applies a 4:1 mitigation ratio for removed trees and a 2:1 mitigation ratio for impacted trees. Mature coast live, interior live, valley, and blue oak trees compose the mixed oak woodland habitat on site. Based on the current site plans, it is expected that oak trees will be removed and impacted as a result of the proposed development. Impacts to oak trees may include trimming, compaction or excavation within the critical root zone (typically defined as 1.5 times the distance from the trunk to the drip line), and placement of year-round or summer watering within the critical root zone. Impacted and removed trees may require mitigation in the form of on-site plantings or off-site protection of existing oak woodland. Recommendations are included in Section 4.2 for avoidance, minimization, and mitigation of impacts to native oak trees

3.2.2 Special-status Wildlife Species

Suitable habitat for nine special-status wildlife species was identified in the survey area, in addition to nesting habitat for migratory bird species. Special-status wildlife species are those that have been given special protection status by CDFW or the California and federal ESAs. Descriptions of these special-status wildlife species are provided below and recommended avoidance, minimization, and mitigation measures are provided in Section 4.2.

Sensitive Amphibian Species

California Red-legged Frog (CRLF; *Rana draytonii*), Federal Threatened / State Species of Special Concern (CSC)

CRLF require permanent or semi-permanent bodies of water such as lakes, streams, and ponds with plant cover for foraging and breeding. Reproduction occurs in aquatic habitats from late November to early April. Egg masses are laid in the water following breeding, often on emergent vegetation. Following metamorphosis, juvenile frogs may remain in the breeding ponds or disperse into uplands regardless of topography. CRLF have been documented dispersing over two miles from aquatic habitat. Dispersing frogs may seek refuge in small mammal burrows or soil fractures. This species is known to occur from Mendocino County to Northern Baja California and eastward through the Northern Sacramento Valley and Sierra Nevada foothills at elevations below 5,000 feet (1,525 meters) (Zeiner et al. 1988-1990a).

According to CNDDB records (CDFW 2020), the nearest documented occurrences are approximately 5.35 miles south of the project site. No potential breeding habitat (i.e., deep pools with emergent vegetation and overhanging cover) was identified within the survey area. However, a review of aerial imagery indicates that three potentially suitable breeding ponds are present on adjacent properties, within 0.75 mile of the project site. Ephemeral drainages adjacent to the site may provide dispersal corridors for this species and suitable upland habitat is also present.

Coast Range Newt (*Taricha torosa*), State CSC
Coast range newt is found along the coast and coast range mountains in California from Mendocino County south to San Diego County at elevations below 4,200 feet (1,280 meters). This species may be found in habitats such as wet forests, oak woodland, chaparral, and rolling grasslands. Newts are terrestrial species which enter slow moving streams, side channels, or pools for aquatic breeding. Breeding may occur from late December through April. Females attach egg masses to submerged branches, vegetation, or rocks just below the surface of the water. Larvae transform and begin to live on land at the end of the summer or early fall (Thompson et al. 2016).

According to CNDDB records (CDFW 2020), the nearest documented occurrence is approximately 4.65 miles west of the project site. Ephemeral drainages adjacent to the site may contain sufficient breeding habitat for coast range newt. Suitable upland refugia is present throughout the project site in the oak woodland (i.e. under fallen leaves and rotting logs) and grasslands.

Sensitive Mammal Species

American Badger (*Taxidea taxus*), State CSC
The range of American badger covers most of North America including throughout California, except for the North Coast region (Del Norte, Humboldt, Mendocino, Sonoma, and Marin Counties). They prefer open and arid habitats such as grasslands, meadows, savannahs, open-canopy desert scrub, and open chaparral. They are predators of fossorial rodents and are adept at quickly excavating deep burrows to access their prey. As such, where badgers are present, the landscape is dotted with large soil tailings. American badgers shelter in burrows they have excavated and, while they are known to traverse a relatively small home range (up to 2.5 acres) they move among burrows frequently. They can be active at all times of day but are primarily nocturnal. This species occurs at elevations below 12,000 feet (3,660 meters). Mating is typically from May through September but, because of delayed implantation, cubs are not born until early spring (Zeiner et al. 1988-1990b). Habitat conversion is a threat to this species.

According to CNDDB records (CDFW 2020), the nearest observation of this species was a roadkill, recorded in 2003, approximately three miles southeast of the project site on Highway 101. In addition, based on local biological knowledge, this species is known to be present on lands surrounding the project site and is regionally common. The project site provides forage and suitable habitat for American badgers.

Monterey Dusky-footed Woodrat (*Neotoma macrotis luciana*), State CSC
Monterey dusky-footed woodrat is a mostly nocturnal species that occurs along Coastal California between Monterey Bay and Morro Bay. This species occurs in a variety of habitats but prefers areas with dense vegetative cover. It builds and occupies middens, which are made from sticks, bark, and leaves at the base of trees, in understory shrubs and on tree

limbs. Threats to this species includes loss of habitat due to development and agriculture (Zeiner et al. 1988-1990c).

According to CNDDB records (CDFW 2020), a few occurrences have been documented within 5 to 10 miles of the project site. Middens were observed in numerous locations throughout the woodland and scrub habitat of the project site.

Mountain Lion (*Puma concolor*) – Southern California/Central Coast Evolutionary Significant Unit, State Candidate
Mountain lions range throughout most of California from sea level to alpine meadows, with the exception of xeric regions of the Mojave and Colorado deserts in southeastern California. It is primarily a predator of small to large mammals but will also feed on birds, fish, insects, grass, and berries. Mountain lions are typically active at night and during dusk and dawn. Timing of reproduction can vary but, in California, most births occur in spring. Litter size is usually two to four young. Young remain with the mother until they are about two years old. Individual home ranges can be between three and fifteen square miles, and male home ranges are typically larger than those of females. Habitat fragmentation due to development and associated roads and power transmission corridors restricts movement and increases proximity and encounter rates with humans, which can be detrimental to mountain lion populations (Zeiner et al. 1988 – 1990a).

Mountain lions in Southern California and Central Coast Regions were recently given Candidate status under the California ESA and therefore have not previously been tracked by CNDDB (CDFW 2020). However, based on the known ecology of the species, mountain lions likely inhabit the adjacent undeveloped lands and dense riparian habitats near the project site. As such, there is potential for mountain lions to use the project site.

Pallid Bat (*Antrozous pallidus*), State CSC
Pallid bat is common at low elevations throughout California and occurs in a variety of habitats including grasslands, shrublands, woodlands, and mixed conifer forest. This species is most common in open, dry habitats with rocky areas for roosting, but may occasionally have day roosts in hollow trees and buildings. Night roosts generally occur in more open areas such as porches and open buildings (Zeiner et al. 1988-1990e).

The nearest documented occurrences of this species are approximately 10.35 miles north of the project site. The large oak trees in and around the project site may provide potential day roosting habitat for pallid bats.

Sensitive Reptile Species

Coast horned lizard (*Phrynosoma blainvillii*), State CSC
Coast horned lizards occur in semi-arid mountains of western and southern California at elevations up to 8,000 feet. This species inhabits grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose, sandy soil. It is frequently found near native ant hills because these ants are its preferred food source. This species may also forage

on beetles, wasps, grasshoppers, flies, and caterpillars. The breeding season is from May to September, and nests are constructed in loose soil (Zeiner et al. 1988-1990f). Habitat conversion to housing and agriculture and the spread of non-native ants (i.e. Argentine ants) have caused this species to decline. Historically, this lizard was extensively exploited by the pet and curio trade (Nafis 2018).

According to CNDDB records (2020), the nearest observation of this species was 11.15 miles north of the project site. Woodlands and grasslands on the project site provide suitable habitat for coast horned lizard. Additionally, numerous native ant mounds and other prey items were observed during the field survey.

Northern California Legless Lizard (*Anniella pulchra*), State CSC
Northern California legless lizard occurs in sparsely vegetated areas such as beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. This species prefers moist, warm, and loose soil; can be found in leaf litter; and will seek refuge under surface objects such as rocks, boards, and logs. Threats to this species include loss of habitat due to development, agriculture, sand mining, off-road vehicle recreation, and invasive plants (Nafis 2018).

According to CNDDB (2020) records, the nearest documented occurrence is approximately 2.45 miles southwest of the project site. Leaf litter and fallen branches in the understory of oak woodland habitat on the project site may provide suitable habitat for this species.

Migratory Nesting Birds and Sensitive Avian Species

Golden eagle (*Aquila chrysaetos*), State Fully Protected
Golden eagle is designated as a Fully Protected species by the CDFW. Fully Protected species may not be taken under any circumstances, and authorization for take may not be granted. Golden eagle is also protected under the federal Bald and Golden Eagle Protection Act. Golden eagles typically occur in semi-open and open habitats and are most common in hilly and mountainous areas with large trees for nesting and open hunting grounds where prey are abundant. This species may abandon nests in early incubation if disturbed by humans (Zeiner et al. 1988-1990g).

According to CNDDB (2020) records, the nearest documented occurrence is approximately 5.45 miles northeast of the project site. Local biological knowledge supports that this species is present in the area with multiple observations between Templeton and Paso Robles. No suitably sized trees are present on site to support nesting; however, this species may be observed foraging on or adjacent to the project site.

Migratory Birds
In addition to those species protected by the state or federal ESA, all native avian species are protected by state and federal legislature, most notably the Migratory Bird Treaty Act and the CDFW Fish and Game Code. Collectively, these and other international regulations make it unlawful to collect, sell, pursue, hunt, or kill native migratory birds, their eggs, nests, or any

parts thereof. The laws were adopted to eliminate the commercial market for migratory bird feathers and parts, especially those of larger raptors and other birds of prey.

Avian species can be expected to occur within and adjacent to the project site during all seasons and throughout construction of the proposed project. The potential to encounter and disrupt these species is highest during the nesting season (generally February 1 through September 15) when nests are likely to be active, and eggs and young are present. Oak woodland, chaparral, and grassland habitats provide suitable foraging and nesting habitat for many species.

3.2.3 Sensitive Habitats

No sensitive or protected habitats occur on the project site.

3.3 Habitat Connectivity

Maintaining connectivity between areas of suitable habitat is critical for the survival and reproduction of plants and wildlife. Intact habitats benefit plants by ensuring adequate dispersal of pollen and seeds within and between population patches, which sustains or grows the population and contributes to the genetic health of the species. Wildlife need contiguous habitats to attain sufficient food resources for their energetic demands; to locate proper resting, burrowing, and/or nesting sites; to facilitate relatively long-distance travel or migration to seek out mates or resources; and for the safe and successful dispersal of young.

The project site is in an agricultural area of northern San Luis Obispo County, in the eastern foothills of the southern Santa Lucia Range. Due to agricultural practices surrounding the project site, connectivity of the project site to adjacent areas of natural habitat is fragmented. Although not contiguous, strips of natural habitat exist to the west, particularly in drainages and ridgelines, providing movement corridors for numerous wildlife species and limited habitat for some wildlife and natural populations of plants to persist. The project as planned may reduce the quality of natural habitat on site but is not expected to increase the current level of habitat fragmentation in the region. No new passage barriers are proposed within aquatic habitat.

4.0 IMPACT ASSESSMENT AND AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

4.1 Summary of Potential Impacts

The property totals approximately 13 acres, with approximately 2 acres planned for temporary disturbance and permanent development. The proposed project will directly impact one special-status plant population and has the potential to directly and/or indirectly impact special-status wildlife species and migratory nesting birds. Direct impacts to wildlife could result from injury or death and to plant populations from reduction of seed bank and/or direct removal of plants.

These impacts may occur via construction-related disturbances such as trampling or crushing from equipment or other construction activities such as grading, vegetation trimming or removal, and excavation. Indirect impacts to sensitive resources could result from construction noise, harassment, dust emissions, or other disruptions during construction. In addition, potential long-term direct and indirect impacts to wildlife may occur as a result of pesticide and rodenticide use.

4.1.1 Impacts to Special-status Plants

Special-status Plants

Salinas milkvetch was identified and mapped within the survey area, including some areas proposed for development. Direct impacts to this species will include removal of individual plants and intact seed banks that occur within and immediately adjacent to work areas, as well as permanent conversion of occupied habitat. Indirect impacts to special-status plants in adjacent areas may result from dust emissions during construction, altered hydrology, or the spread of non-native and invasive plant species to areas not previously impacted.

Oak Trees

A majority of the project site consists of oak woodland. As such, it is expected that oak tree removals will be necessary for project implementation. In addition, trimming and/or disturbance within the critical root zone of several trees may be required. Impacts to and removal of individual oak trees and oak woodland habitat are protected under CEQA via Senate Bill 1334 (Kuehl Bill) and California Public Resources Code 21083.4

4.1.2 Impacts to Special-status Wildlife

American Badger

Direct impacts to American badgers may occur as a result of construction-related activities including crushing, trampling, vehicle strikes, and/or entombment. Increased short- and long-term anthropogenic activity in the vicinity of viable populations has potential to indirectly impact this species as a result of permanent habitat conversion, increased light pollution, and primary and secondary exposure to agricultural or residential-use chemicals including rodenticides.

Monterey Dusky-footed Woodrat

Direct impacts to Monterey dusky-footed woodrat may occur during construction as a result of crushing and trampling by vehicles and equipment. Indirect impacts to this species could include removal of habitat, increased light pollution, and potential primary and secondary exposure to agricultural or residential-use chemicals including rodenticides.

Mountain Lion

With its vicinity to the Santa Lucia Mountain Range and availability of prey, particularly deer, this site may be within the home range of a mountain lion. Direct impacts may occur during construction as a result of vehicle strikes. Indirect impacts to this species could occur as a result of increased short- and long-term anthropogenic activity in the vicinity and potential primary and secondary exposure to agricultural or residential-use chemicals including rodenticides. Development of the site may also reduce the quality of habitat for important prey species.

Pallid Bat

Direct and indirect impacts to pallid bats may occur if they are roosting on site. It is expected that oak trees will be removed; therefore, direct and indirect impacts may occur if roosting habitat is removed or roosting bats are deterred. In addition, potential primary and secondary exposure to agricultural or residential-use chemicals may occur.

Special-status Amphibians and Reptiles

If CRLF or coast range newt are using the drainages and ponds in the vicinity of the project site, juveniles and adults may disperse through the upland habitat on site, particularly during the rainy season. If individual CRLF, coast range newt, coast horned lizards, or northern California legless lizards are present on site during construction, they could be crushed or trampled by vehicles and equipment. In addition, there is potential for these species to use small mammal burrows on site. As such, excavation or crushing of burrows during construction may result in direct impacts to these species. Direct impacts to coast horned lizards may also occur as a result of vehicle strikes if this species is basking on roadways.

Sensitive and Nesting Birds

Direct impacts to golden eagles and other bird species are most likely to occur if construction activities take place during the typical avian nesting season, generally February 1 through September 15, and as early as January for golden eagles. Direct and indirect impacts may occur if tree trimming or removal is required. For example, these actions can destroy nests, remove nesting habitat, or cause disturbance that may lead to nest failure or otherwise harass nesting, resident, or transient birds. In addition, the potential for primary and secondary exposure to agricultural and residential-use chemicals, including rodenticides, may occur.

4.2 Recommended Avoidance, Minimization, and Mitigation Measures

The following avoidance, minimization, and mitigation measures are recommended to reduce the anticipated impacts to the maximum extent feasible.

4.2.1 General Avoidance and Minimization Measures

Measure 1: Environmental Awareness Training

An environmental awareness training shall be presented to all construction personnel by a qualified biologist prior to the start of project activities. The training shall include color photographs and a description of the ecology of all special-status species known or determined to have potential to occur, as well as other sensitive resources requiring avoidance near project impact areas. The training shall also include a description of protection measures required by discretionary permits, an overview of the ESA, implications of noncompliance with the ESA, and required avoidance and minimization measures.

Measure 2: Site Maintenance and General Operations

The following general measures are recommended to minimize impacts during active construction:

- The use of heavy equipment and vehicles shall be limited to the proposed project limits and defined staging areas/access points. The boundaries of each work area shall be clearly defined and marked with high visibility fencing. No work shall occur outside these limits.
- Project plans, drawings, and specifications shall show the boundaries of all work areas on site and the location of erosion and sediment controls, limit delineation, and other pertinent measures to ensure the protection of sensitive habitat areas and associated resources.
- Secondary containment such as drip pans shall be used to prevent leaks and spills of potential environmental contaminants.
- Washing of concrete, paint, or equipment, and refueling and maintenance of equipment shall occur only in designated areas. Sandbags and/or absorbent pads shall be available to prevent contaminated water and/or spilled fuel from leaving the site.
- Construction equipment shall be inspected by the operator daily to ensure that equipment is in good working order and no fuel or lubricant leaks are present.
- The use of pesticides (including rodenticides) and herbicides on the property shall be in compliance with all local, state, and federal regulations to avoid primary and secondary poisoning of sensitive species that may be using the site.

Measure 3: Lighting

Any temporary construction lighting or permanent lighting introduced for new developments shall avoid nighttime illumination of suitable habitat features for special-status species (i.e. adjacent grassland, chaparral, and oak woodland). Temporary construction lighting will be kept to the minimum amount necessary and shall be directed toward active work areas and away from open spaces. To minimize the effects of future exterior lighting on special-status wildlife species, all outdoor lighting fixtures shall be positioned and/or shielded to avoid direct lighting of off-site natural habitat areas. Exterior lighting shall be in accordance with International Dark Sky Association guidelines for reducing light pollution for the benefit of wildlife.

4.2.2 Avoidance and Minimization of Impacts to Special-status Plants

Measure 4: Special-status Botanical Species

The following specific recommendations are made to reduce the anticipated impacts to special-status plant populations to the maximum extent feasible:

- Prior to the start of construction, updated botanical surveys will be completed during the appropriate seasons (i.e., approximately April through July) within all proposed disturbance areas. Surveys will include identification and mapping of the current extent of all special-status plant populations.

- To the extent feasible, ground disturbance will be minimized in areas where special-status plant populations have been mapped during 2020 surveys and all subsequent surveys.
- During the appropriate season (i.e., approximately June through August) prior to the start of construction, mature seed will be collected from individual plants that will be removed as a result of the proposed development. This seed will be temporarily stored in paper bags or envelopes in a cool, dry location. Collected seed will be spread in areas of suitable habitat on site that will not be disturbed as part of the proposed development. In particular, the seed should be used to enhance and expand upon existing population patches that were mapped throughout the site.
- The top four to six inches of topsoil will be salvaged during initial grading and stored separately. Stored topsoil will be spread in temporary disturbance areas (e.g., road edges, and utility trench lines) following the completion of construction.

If a mitigation plan is deemed necessary, it will be submitted for approval to the appropriate agencies prior to the start of construction and include the following, at a minimum:

- Discuss the proposed construction methods, construction schedule, and the implementation schedule of activities proposed as part of the plan.
- Quantify the anticipated impacts to special-status plant species, either in acres of occupied habitat or number of individuals impacted.
- Include a description of the mitigation activities proposed for each. As appropriate, the measures will include:
    - a detailed description of topsoil salvage procedures and long-term soil stockpile storage methods;
    - methods and timing of any proposed seed collection and storage;
    - locations and demarcation of full-time avoidance areas during construction;
    - locations and methods for restoration, replanting, and/or reseeding (e.g., decompaction, recontouring, scarification, mulching, hand broadcasting, hydroseeding, and weed control); and,
    - short- and/or long-term monitoring protocols and/or vegetative growth success criteria.
- Include a requirement for photographic documentation and a post-implementation report.

Measure 5: Oak Tree Protection and Mitigation

To the maximum extent feasible, impacts to oak trees and oak woodland habitat shall be avoided and minimized. Any oak trees located within 50 feet of the proposed work limits that are to be avoided and protected shall be clearly fenced or flagged during construction to avoid inadvertent impacts. A mitigation plan shall be prepared that details the methods and requirements for oak tree mitigation. At a minimum, the plan shall include the following:

- A detailed inventory of the species and quantity of all oak trees to be removed or impacted.

- Discuss the proposed construction methods, construction schedule, and the implementation schedule of activities proposed as part of the plan.
- Quantify and describe the anticipated impacts to individual oak trees and/or oak woodland habitat, as applicable.
- Identify all appropriate methods for fulfillment of required mitigation (e.g., on-site plantings, conservation easement, or in-lieu fee).
- Describe detailed planting methods, as appropriate.
- Identify suitable areas for establishment of new oak trees and/or protection of existing oak woodland habitat, as appropriate.
- Describe short-term and long-term monitoring protocols and/or vegetative growth performance criteria for mitigation success.

The plan shall be prepared by a qualified botanist, arborist, or restoration ecologist and be submitted to the County for approval prior to the start of construction.

4.2.3 Avoidance and Minimization of Impacts to Special-status Wildlife

Measure 6: Preconstruction Survey for American Badger

A qualified biologist shall complete a preconstruction survey within 30 days prior to the start of initial project activities to ensure American badgers are not present within proposed work areas. If potential dens are discovered, they shall be monitored with a remote camera or tracking medium for at least three days to determine if they are occupied. If the qualified biologist determines that potential dens may be active, an exclusion buffer shall be established within 50 feet of the den and the appropriate resource agencies shall be contacted for further guidance. If active dens are found during the breeding and rearing season, no activity shall occur within 200 feet of the den without agency guidance and approval.

Measure 7: Preconstruction Survey for Monterey Dusky-footed Woodrat

Prior to the start of work within 50 feet of suitable woodrat habitat, a survey shall be conducted by a qualified biologist to identify and flag woodrat middens for avoidance. A minimum 10-foot buffer area shall be clearly delineated around any woodrat middens that are discovered during the survey. Due to the likelihood for woodrats to flee the midden as a result of nearby construction activity, a biologist shall monitor initial vegetation clearing and earth work within 25 feet of woodrat midden. If woodrats are observed fleeing middens, work shall be temporarily halted until woodrats flee outside the area of impact and/or are relocated to nearby suitable habitat areas by the qualified biologist.

Any woodrat houses that are deemed unavoidable shall be carefully dismantled mechanically (e.g., excavator with thumb) or with hand tools from the top down, allowing any woodrats to escape unharmed. A biological monitor shall be present for dismantling. Due to human health concerns associated with disturbance of woodrat middens and inhalation of dust and particles, the monitor shall not assist in physical woodrat house dismantling and shall position themselves upwind during the activity.

Measure 8: Special Considerations to Avoid or Minimize Impacts to Mountain Lions

Because mountain lions are large, highly mobile predators, and no denning habitat exists on site, a preconstruction survey targeted to mountain lions will not produce helpful results. Therefore, assuming mountain lions will use the project site, the general avoidance and minimization measures listed in Section 4.2.1 will avoid or minimize impacts to mountain lions. In particular, the measure related to the use of rodenticides is important. Anticoagulant rodenticides, such as brodifacoum, bromadiolone, difenacoum, and difethialone as well as other pesticides and herbicides have negative effects on mountain lion populations in Southern California and the Central Coast. Therefore, the use of these products on the property shall be in compliance with all local, state, and federal regulations to avoid primary and secondary poisoning of mountain lions.

Measure 9: Preconstruction Surveys for Pallid Bat

Prior to the start of work, all suitable roosting habitat for pallid bats (e.g., mature oak or sycamore trees and buildings) within 100 feet of work areas shall be surveyed to determine if bats are roosting in these areas. If bats are detected and impacts are deemed unavoidable, a bat exclusion plan shall be developed and submitted to CDFW for approval prior to implementing any exclusion methods. If no bats are detected, no further action is required.

Measure 10: Preconstruction Survey and Monitoring for Special-status Amphibians and Reptiles

A qualified biologist shall conduct a preconstruction survey immediately prior to the start of work within 50 feet of suitable habitat for Northern California legless lizard, coast horned lizard, coast range newt, and CRLF. Surveys will be conducted by gently disturbing scrub understory and upper layers of oak tree duff. Construction monitoring shall also be conducted by a qualified biologist during all initial ground disturbing and vegetation removal activities (e.g., grading, grubbing, vegetation trimming, or vegetation removal including tree removal) within suitable habitat. If Northern California legless lizards, coast horned lizards, or coast range newts are discovered during surveys and monitoring, they will be hand captured and relocated to suitable habitat outside the area of impact. If CRLF are discovered, they shall be allowed to leave on their own volition and the resource agencies shall be contacted.

Measure 11: Preconstruction Survey for Sensitive and Nesting Birds

If work is planned to occur between February 1 and September 15, a qualified biologist shall survey the area for nesting birds within one week prior to activity beginning on site. In addition, if work is planned to occur as early as January 1, a qualified biologist shall complete a focused survey for nesting golden eagles within one-quarter mile of the project site, as feasible based on access. If nesting birds are located on or near the proposed project site, they shall be avoided until they have successfully fledged, or the nest is no longer deemed active. A non-disturbance buffer of 150 feet will be placed around non-listed, passerine species and a 500-foot buffer will be implemented for raptor species. All activity will remain outside of that buffer until a qualified biologist has determined that the young have fledged or that proposed construction activities would not cause adverse impacts to the nest, adults, eggs, or young. If special-status avian

species are identified and nesting within the work area, no work will begin until an appropriate buffer is determined in consultation with CDFW, and/or the USFWS.

5.0 CONCLUSION

One special-status botanical species, Salinas milkvetch, will be impacted as a result of the proposed development. In addition, direct and indirect impacts to special-status wildlife species may occur if they are present on site at the time of construction. Further, impacts to and removal of individual oak trees and/or oak woodland habitat is anticipated. Implementation of the recommended avoidance, minimization, and mitigation measures will reduce impacts to sensitive resources to a less than significant level.

6.0 REFERENCES

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

California Department of Fish and Wildlife. 2020. California Natural Diversity Database: RareFind 5. Available online with subscription at: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed March 2020 – June 2020.

California Native Plant Society. 2020a. Online Inventory of Rare and Endangered Plants. Sacramento, California. Available Online at: http://www.rareplants.cnps.org/. Accessed April - June 2020.

_____2020b. A Manual of California Vegetation, Online Edition. Available online at: https://www.cnps.org/vegetation. Accessed April - June 2020.

_____2020c. The CNPS Ranking System. Available online at: https://www.cnps.org/rare-plants/cnps-rare-plant-ranks. Accessed April - June 2020.

Consortium of California Herbaria. 2020. Regents of the University of California. Available online at: http://ucjeps.berkeley.edu/consortium/. Accessed March 2020 – June 2020.

Google Earth Pro V 7.3.3.7699 (2020). 1994-2020. Templeton, California. 35.60555, -120.728832. DigitalGlobe. Accessed March 2020 – June 2020.

Jepson Flora Project (eds.). 2020. Jepson eFlora. Available online at: http://ucjeps.berkeley.edu/eflora/. Accessed April 2020 – June 2020.

Nafis, G. 2018. California Herps - A Guide to the Amphibians and Reptiles of California. Available online at: http://www.californiaherps.com/. Accessed April 2020.

Natural Resources Conservation Service/U.S. Department of Agriculture. 2020. Available online at: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. March 2020 – June 2020.

Sawyer, John O., Todd Keeler-Wolf, and Julie M. Evens. 2009. *A Manual of California Vegetation, Second Edition.* California Native Plant Society Press: Sacramento, California.

Thompson, R.C, A.N. Wright, and H.B Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press.

United States Geological Survey. 2020. Templeton, California 7.5-minute Quadrangle. Available online at: https://store.usgs.gov/. Accessed April 2020.

United States Fish and Wildlife Service. 2020a. USFWS Threatened and Endangered Species Active Critical Habitat Portal. Available online at: https://ecos.fws.gov/ecp/. Accessed March - June 2020.

--------. 2020b. National Wetland Inventory Mapper. Available online at: https://www.fws.gov /wetlands/Data/Mapper.html. Accessed March 2020.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990a. Life History Account for California Red-legged Frog. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.

--------. 1988-1990b. Life History Account for American Badger. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.

--------. 1988-1990c. Life History Account for Dusky-footed Woodrat. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.

--------. 1988-1990d. Life History Account for Mountain Lion. California's Wildlife. Vol. I – III. California Department of Fish and Game, Sacramento, California.

--------. 1988-1990e. Life History Account for California Pallid Bat. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.

--------. 1988-1990f. Life History Account for Coast Horned Lizard. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.

--------. 1988-1990g. Life History Account for Golden Eagle. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.

APPENDIX A – PROJECT MAPS

Figure 1: Project Vicinity
Figure 2: Survey Area
Figure 3A: 5-mile CNDDB – Botanical
Figure 3B: 5-mile CNDDB – Wildlife
Figure 4: Soils
Figure 5: Vegetation Communities and Sensitive Resources

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2281 Kiler Canyon Road

Figure 1: Project Vicinity

Project Site

Survey Area

Miles

0 0.25 0.5 1

N

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2281 Kiler Canyon Road
Figure 2: Survey Area

Approx. Property Boundary

Focused Survey Area

0 100 200 400 Feet

N

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Survey Location

5-Mile Buffer

1 - Bristlecone Fir

2 - Lemmon's Jewelflower

3 - Mesa Horkelia

4 - Shining Navarretia

5 - Umbrella Larkspur

6 - Woodland Woollythreads

7 - Valley Oak Woodland

Miles

0 0.5 1 2 3

N

TERRA-VERDE

2281 Kiler Canyon Road

Figure 3A: 5-Mile CNDDB - Botanical

2281 Kiler Canyon Map

Figure 3B: 5-Mile CNDDB - Wildlife

- Survey Location
- 5-Mile Buffer
- 8 - American Badger
- 9 - Atascadero June Beetle
- 10 - Coast Range Newt
- 11 - Least Bell's Vireo
- 12 - Lompoc Grasshopper
- 13 - Northern California Legless Lizard
- 14 - San Joaquin Kit Fox
- 15 - Tricolored Blackbird
- 16 - Vernal Pool Fairy Shrimp
- 17 - Western Pond Turtle
- 18 - Western Spadefoot

N

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0 0.5 1 2 3 Miles

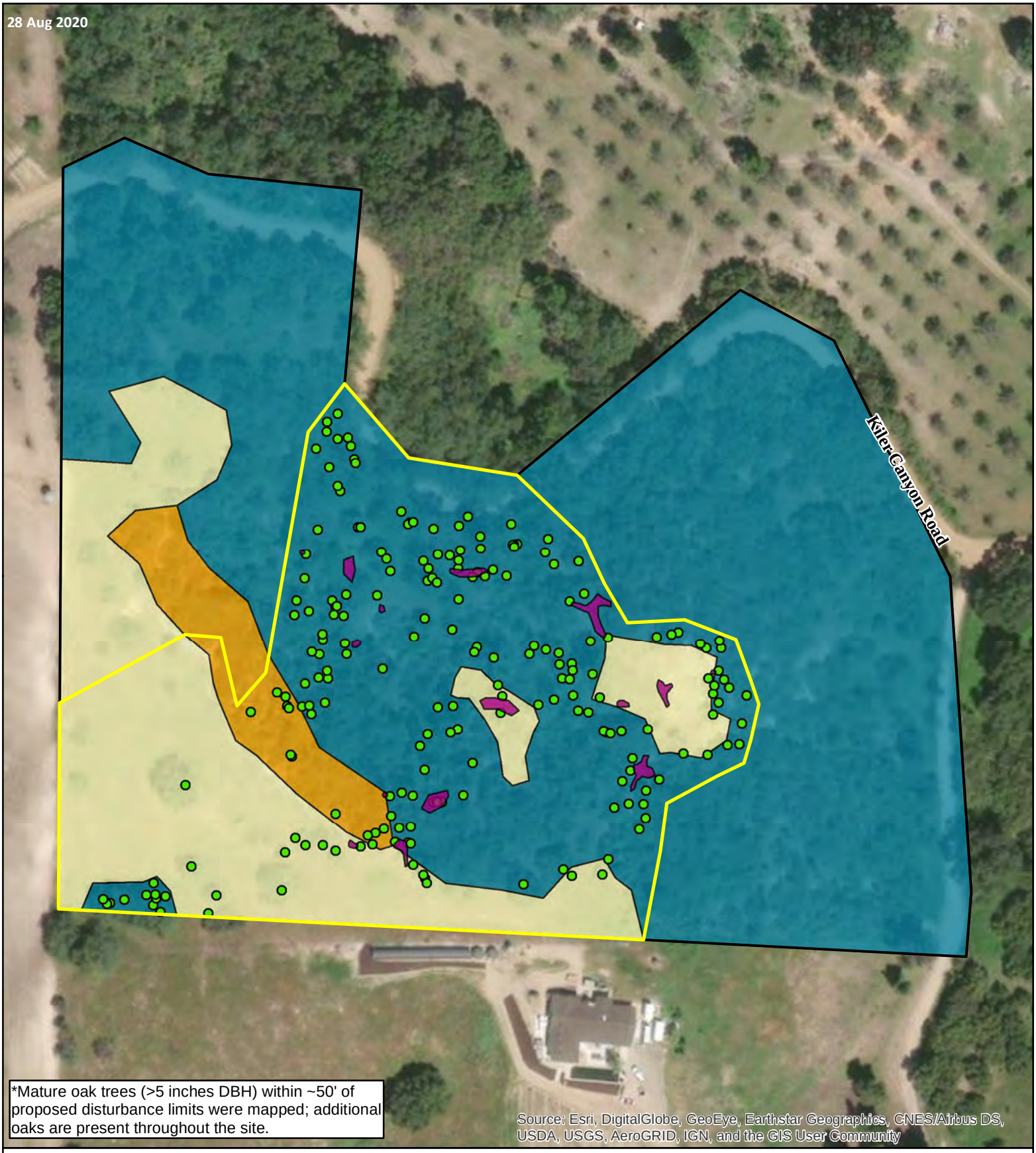
2281 Kiler Canyon Road
Figure 4: Soils

Survey Area
Linne-Calodo Complex, 9-30% Slopes
Linne-Calodo Complex, 30-50% Slopes
Nacimiento Silty Clay Loam, 9-30% Slopes

0 125 250 500 Feet

N

TERRA-VERDE



2281 Kiler Canyon Road

Figure 5: Vegetation Communities and Sensitive Resources

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APPENDIX B –
Regionally Occurring Special-status Species Table

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Regionally occurring special-status species list for the Templeton and surrounding 7.5-minute quadrangles: Adelaida, Atascadero, Creston, Estrella, Morro Bay North, Paso Robles, Santa Margarita, and York Mountain.

SENSITIVE VEGETATION COMMUNITIES AND HABITATS			
Community/ Habitat[1]	**Description[2]**	**Observed on Site?[3]**	**Comments / Potential for Occurrence**
California Natural Diversity Database (CNDDB)-designated Sensitive Natural Communities			
Northern Interior Cypress Forest	An open, fire-maintained scrubby forest similar to Knobcone Pine Forest but dominated by one of several cypress (*Hesperocyparis* spp.) species. These stands may be as much as 15m tall, but usually are lower. Occurs on dry, rocky, sterile, often ultramafic soils, frequently associated with Serpentine Chaparral. Intergrades on less severe sites with Upper Sonoran Mixed Chaparral, Montane Chaparral, or Knobcone Pine Forest; and on more mesic sites with Mixed Evergreen Forest or Montane Coniferous Forest. Scattered through the Siskiyou Mountains, North and South Coast Ranges, Cascades and northern Sierra Nevada.[4]	No	Diagnostic species, substrate, and range are not observed on site; this community is not present within the survey area.
Valley Oak Woodland	Contains at least 50% relative cover in the tree canopy, or at least 30% relative cover when other tree species such as coast live oak (*Quercus agrifolia*) or arroyo willow (*S. lasiolepis*) are present. Tree density tends to decrease as one moves from lowlands to uplands. The understory shrub layer can be dense along drainages and very sparse in uplands. Trees are generally less than 30 meters tall, and the canopy is open to continuous. Shrubs are common to occasional, and the herbaceous layer may be grassy. This community is found in valley bottoms with seasonally saturated soils that may intermittently flood lower slopes and summit valleys at elevations from 0 to 775 meters.[4]	No	Valley oak trees are present at low cover as a component of mixed oak woodland; however, valley oak-dominated woodland is not present on site.

[1]List of sensitive vegetation communities and habitats obtained from CNDDB (CNDDB, 2018).

[2]Community and habitat descriptions acquired from CNDDB (CNDDB, 2018).

[3]Communities/habitats observed during field surveys indicated with **bold** font and gray highlight and are discussed further in the report.

[4]Manual of California Vegetation (Sawyer et al. 2009).

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed / Habitat Present?[4]**	**Comments**
Abies bracteata Bristlecone fir	CRPR 1B.3	N/A	Steep, rocky, fire-resistant slopes; generally in canyon-live-oak phase of mixed-evergreen forest. Elevation: 210 - 1,600 meters (m).	No / No	Species not observed during spring and summer surveys.
Abronia maritima Red sand-verbena	CRPR 4.2	February - October	Coastal dunes. Elevation: < 100 m.	No / No	Species not observed during typical blooming/fruiting period.
Agrostis hooveri Hoover's bent grass	CRPR 1B.2	April - August	Dry, usually sandy soils in open chaparral, oak woodland, and grassland. Elevation: < 600 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Amsinckia douglasiana Douglas' fiddleneck	CRPR 4.2	March - June	Unstable shaly sedimentary slopes. Elevation: 100 - 1,600 m.	No / No	Species not observed during typical blooming/fruiting period.
Antirrhinum ovatum Oval-leaved snapdragon	CRPR 4.2	May - July	Heavy, adobe clay soils on gentle, open slopes, also disturbed areas. Elevation: 200 - 1,400 m.	No / No	Species not observed during typical blooming/fruiting period.
Arctostaphylos luciana Santa Lucia manzanita	CRPR 1B.2	January - March	Shale outcrops, slopes, upland chaparral near coast. Elevation: 100 - 800 m.	No / No	Species not observed during spring and summer surveys.
Arctostaphylos obispoensis Bishop manzanita	CRPR 4.3	February - March	Rocky, generally serpentine soils in chaparral, woodland, and forest near the coast. Elevation: 60 - 950 m.	No / No	Species not observed during spring and summer surveys.
Arctostaphylos pilosula Santa Margarita manzanita	CRPR 1B.2	December - March	Shale outcrops, slopes, chaparral. Elevation: 30 - 1,250 m.	No / No	Species not observed during spring and summer surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed / Habitat Present?[4]**	**Comments**
Astragalus didymocarpus var. *milesianus* Miles' milk-vetch	CRPR 1B.2	March - June	-Grassy areas near the coast. Elevation: < 400 m.	No / No	Species not observed during typical blooming/fruiting period.
Astragalus macrodon **Salinas milkvetch**	CRPR 4.3	April - June	Eroded pale shales or sandstone, serpentine alluvium. Elevation: 200 - 1,500 m.	**Yes / Yes**	Observed in grassland and woodland habitats within the survey area.
Calochortus obispoensis San Luis mariposa lily	CRPR 1B.2	May - June	Dry serpentine, generally open chaparral. Elevation: 100 - 500 m.	No / No	Species not observed during typical blooming/fruiting period.
Calochortus simulans La Panza mariposa lily	CRPR 1B.3	May - July	Sand (often granitic), grassland, and yellow pine forest. Elevation: < 1,100 m.	No / No	Species not observed during typical blooming/fruiting period.
Calycadenia villosa Dwarf calycadenia	CRPR 1B.1	May - September	Dry, rocky hills, ridges, grassland, openings in foothill woodland. Elevation: 250 - 850 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Calystegia subacaulis subsp. *episcopalis* Cambria morning-glory	CRPR 4.2	April - June	Dry, open scrub and grassland along the coast; disturbance tolerant. Elevation: < 500 m.	No / No	Species not observed during typical blooming/fruiting period.
Camissoniopsis hardhamiae Hardham's evening primrose	CRPR 1B.2	March - May	Sandy soil, limestone; disturbed or burned areas in oak woodland. Elevation: 240 - 600 m.	No / No	Species not observed during typical blooming/fruiting period.
Carex obispoensis San Luis Obispo sedge	CRPR 1B.2	March - June	Springs, streamsides in chaparral, generally on serpentine. Elevation: < 800 m.	No / No	Species not observed during typical blooming/fruiting period.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed / Habitat Present?[4]**	**Comments**
Castilleja densiflora subsp. *obispoensis* San Luis Obispo owl's-clover	CRPR 1B.2	March - June	Coastal grassland. Elevation: < 400 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Caulanthus lemmonii Lemmon's jewelflower	CRPR 1B.2	March - May	Grassland, chaparral, and scrub. Elevation: 80 - 1,100 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Ceanothus cuneatus var. *fascicularis* Lompoc ceanothus	CRPR 4.2	February - May	Sandy substrates, coastal chaparral. Elevation: < 275 m.	No / No	Species not observed during typical blooming/fruiting period.
Chorizanthe breweri Brewer's spineflower	CRPR 1B.3	April - August	Gravelly or rocky serpentine outcrops associated with scrub, chaparral, and woodland habitats. Elevation: 60 - 800 m.	No / No	Species not observed during typical blooming/fruiting period.
Chorizanthe douglasii Douglas' spineflower	CRPR 4.3	April - July	Sand or gravel associated with chaparral, scrub, woodland, grassland, and forest habitats. Elevation: 300 - 1,600 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Chorizanthe palmeri Palmer's spineflower	CRPR 4.2	May - August	Serpentine soil associated with chaparral, scrub, grassland, and woodland habitats. Elevation: 60 - 700 m.	No / No	Species not observed during typical blooming/fruiting period.
Chorizanthe rectispina Straight-awned spineflower	CRPR 1B.3	May - July	Sand or gravel associated with scrub, chaparral, and woodland habitats. Elevation: 200 - 600 m.	No / Yes	Species not observed during typical blooming/fruiting period.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed / Habitat Present?[4]**	**Comments**
Cirsium fontinale var. *obispoense* Chorro Creek bog thistle	State: Endangered Fed: Endangered CRPR 1B.2	April - October	Serpentine seeps and streams. Elevation: < 350 m.	No / No	Species not observed during typical blooming/fruiting period.
Cirsium occidentale var. *lucianum* Cuesta Ridge thistle	CRPR 1B.2	April - June	Chaparral, woodland, or forest openings, often on serpentine. Elevation: 500 - 750 m.	No / No	Species not observed during typical blooming/fruiting period.
Convolvulus simulans Small-flowered morning-glory	CRPR 4.2	April - June	Clay substrates, occasionally serpentine in annual grassland, coastal sage scrub, and chaparral. Elevation: 30 - 875 m.	No / No	Species not observed during typical blooming/fruiting period.
Deinandra paniculata Paniculate tarplant	CRPR 4.2	May - November	Grassland, open chaparral and woodland, and disturbed areas, often in sand. Elevation: 1,320 m.	No / No	Species not observed during typical blooming/fruiting period.
Delphinium parryi subsp. *blochmaniae* Dune larkspur	CRPR 1B.2	April - May	Coastal chaparral, sand. Elevation: < 200 m.	No / No	Species not observed during typical blooming/fruiting period.
Delphinium parryi subsp. *eastwoodiae* Eastwood's larkspur	CRPR 1B.2	March - May	Coastal chaparral and grassland on serpentine. Elevation: 100 - 500 m.	No / No	Species not observed during typical blooming/fruiting period.
Delphinium umbraculorum Umbrella larkspur	CRPR 1B.3	April - June	Moist oak forest. Elevation: 400 - 1,600 m.	No / No	Species not observed during typical blooming/fruiting period.
Dudleya abramsii subsp. *bettinae* Betty's dudleya	CRPR 1B.2	May - July	Rocky outcrops in serpentine grassland and scrub. Elevation: 50 - 180 m.	No / No	Species not observed during typical blooming/fruiting period.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed / Habitat Present?[4]**	**Comments**
Dudleya abramsii subsp. *murina* Mouse-gray dudleya	CRPR 1B.3	May - June	Serpentine outcrops. Elevation: 120 - 300 m.	No / No	Species not observed during typical blooming/fruiting period.
Dudleya blochmaniae subsp. *blochmaniae* Blochman's dudleya	CRPR 1B.1	April - June	Open, rocky slopes, often serpentine or clay-dominated. Elevation: < 450 m.	No / No	Species not observed during typical blooming/fruiting period.
Eleocharis parvula Small spikerush	CRPR 4.3	Late winter - fall	Brackish, wet soil in coastal areas. Elevation: 50 m.	No / No	Species not observed during typical blooming/fruiting period.
Eriastrum luteum Yellow-flowered eriastrum	CRPR 1B.2	May - June	Drying slopes, in sandy or gravelly soil associated with chaparral or woodland. Elevation: < 1,000 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Erigeron blochmaniae Blochman's leafy daisy	CRPR 1B.2	June - August	Sand dunes and hills. Elevation: < 70 m.	No / No	Species not observed during typical blooming/fruiting period.
Eschscholzia hypecoides San Benito poppy	CRPR 4.3	March - June	Grassy areas in woodland, chaparral. Elevation: 200 - 1,600 m.	No/ Yes	Species not observed during typical blooming/fruiting period.
Extriplex joaquinana San Joaquin spearscale	CRPR 1B.2	April - October	Alkaline soils associated with chenopod scrub and grassland. Elevation: < 840 m.	No / No	Species not observed during typical blooming/fruiting period.
Fritillaria ojaiensis Ojai fritillary	CRPR 1B.2	February - May	Rocky slopes, river basins. Elevation: 300 - 500 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Fritillaria viridea San Benito fritillary	CRPR 1B.2	March - May	Shrub understory of serpentine slopes, streamsides, and roadsides. Elevation: 200 - 1,500 m.	No / No	Species not observed during typical blooming/fruiting period.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed / Habitat Present?[4]**	**Comments**
Hesperevax caulescens Hogwallow starfish	CRPR 4.2	March - June	Drying shrink-swell clay of vernal flats, steep slopes (sometimes serpentine). Elevation: < 500 m.	No / No	Species not observed during typical blooming/fruiting period.
Horkelia cuneata var. *puberula* Mesa horkelia	CRPR 1B.1	February - September	Dry, sandy coastal chaparral, scrub, and woodland. Elevation: 70 - 870 m.	No / No	Species not observed during typical blooming/fruiting period.
Horkelia cuneata var. *sericea* Kellogg's horkelia	CRPR 1B.1	April - September	Old dunes, coastal sandhills in woodland, scrub, and chaparral openings. Elevation: < 200 m.	No / No	Species not observed during typical blooming/fruiting period.
Juncus luciensis Santa Lucia dwarf rush	CRPR 1B.2	April - August	Wet, sandy soils of seeps, meadows, vernal pools, streams, roadsides. Elevation: 300 - 1,900 m.	No / No	Species not observed during typical blooming/fruiting period.
Layia jonesii Jones' layia	CRPR 1B.2	March - May	Open serpentine or clayey slopes. Elevation: < 300 m.	No / No	Species not observed during typical blooming/fruiting period.
Lepidium jaredii Jared's peppergrass	CRPR 1B.2	March - April	Alkali bottoms, slopes, washes, dry hillsides in vertic clay, acidic, and gypsiferous soils. Elevation: 500 - 700 meters.	No / No	Species not observed during typical blooming/fruiting period.
Malacothamnus jonesii Jones' bush-mallow	CRPR 4.3	May - July	Open chaparral in foothill woodland. Elevation: 250 - 830 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Malacothamnus palmeri var. *involucratus* Carmel Valley bush-mallow	CRPR 1B.2	May - July	Valleys in chaparral, scrub, and woodland. Elevation: 30 - 800 m.	No / Yes	Species not observed during typical blooming/fruiting period.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed / Habitat Present?[4]**	**Comments**
Malacothamnus palmeri var. *palmeri* Santa Lucia bush-mallow	CRPR 1B.2	May - July	Interior valleys, foothills. Elevation: 30 - 800 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Meconella oregana Oregon meconella	CRPR 1B.1	March - April	Shaded canyons along the coast. Elevation: < 1,000.	No / No	Species not observed during typical blooming/fruiting period.
Monardella palmeri Palmer's monardella	CRPR 1B.2	June - August	Chaparral, forest habitat on serpentine. Elevation: 200 - 800 m.	No / No	Species not observed during typical blooming/fruiting period.
Monolopia gracilens Woodland woollythreads	CRPR 1B.2	March - July	Serpentine grassland, open chaparral, oak woodland. Elevation: 100 - 1,200 m.	No / No	Species not observed during typical blooming/fruiting period.
Navarretia fossalis Spreading navarretia	CRPR 1B.1	April - June	Vernal pools, ditches in chenopod scrub, marshes, swamps, and playas. Elevation: 30 - 1,300 m.	No / No	Species not observed during typical blooming/fruiting period.
Navarretia nigelliformis subsp. *radians* Shining navarretia	CRPR 1B.2	May - July	Vernal pools, clay depressions. Elevation: 150 - 1,000 m.	No / No	Species not observed during typical blooming/fruiting period.
Nemacladus secundiflorus var. *secundiflorus* Large-flowered nemacladus	CRPR 4.3	April - May	Dry, gravelly slopes. Elevation: 200 - 2,000 m.	No / No	Species not observed during typical blooming/fruiting period.
Plagiobothrys uncinatus Hooked popcornflower	CRPR 1B.2	April - May	Chaparral, canyon sides, rocky outcrops; ± fire follower. Elevation: 300 - 600 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Senecio aphanactis Chaparral ragwort	CRPR 2B.2	January - May	Alkaline flats, dry open rocky areas. Elevation: 10 - 550 m.	No / Yes	Species not observed during typical blooming/fruiting period.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed / Habitat Present?[4]**	**Comments**
Senecio astephanus San Gabriel ragwort	CRPR 4.3	April - June	Steep, rocky slopes in chaparral, coastal sage scrub, and oak woodland. Elevation: 400 - 1,500 m.	No / Yes	Species not observed during typical blooming/fruiting period.
Sidalcea hickmanii subsp. *anomala* Cuesta Pass checkerbloom	State Rare CRPR 1B.2	May - June	Closed-cone conifer forest, chaparral. Generally on serpentine. Elevation: 600 - 800 m.	No / No	Species not observed during typical blooming/fruiting period.
Suaeda californica California seablite	Federal Endangered CRPR 1B.1	July - October	Margins of coastal salt marshes. Elevation: < 5 m.	No / No	Species not observed during typical blooming/fruiting period.

[1] List of regionally-occurring special-status species acquired from CNDDB (CDFW 2020), CCH (2020), and CNPS Rare and Endangered Plant Inventory (CNPS 2020), and local expert knowledge.

[2] Listing status obtained from CNDDB (CDFW 2020) and CNPS Rare and Endangered Plant Inventory (CNPS 2020).

[3] Blooming period and habitat type obtained from Jepson eFlora (2020) and occasionally supplemented with information provided by CNPS (Jepson eFlora 2020; CNPS 2020).

[4] Species observed during field surveys indicated with **bold** font; species determined to have suitable habitat present on the site, even marginally suitable habitat, indicated with gray highlight. Species highlighted gray are discussed further in the report.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Actinemys pallida Southwestern pond turtle	State: CSC	April - August	Riparian areas such as ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with either a rocky or muddy bottom. Prefers shallow pools with logs or rocks for basking. Can enter brackish or seawater.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Agelaius tricolor Tricolored blackbird	State: CSC	February - August	Needs nest sites near open, fresh water, protected habitat (such as cattails or tall rushes), and suitable feeding areas (e.g., pastures, rice fields, or grassland).	No / No	No suitable nesting habitat in the survey area; not observed surveys and not expected to occur.
Ammodramus savannarum Grasshopper sparrow	State: CSC	April - July	Dense grasslands on rolling hills, lowland plains, in valleys & on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs & scattered shrubs. Loosely colonial when nesting.	No / No	No suitable nesting habitat in the survey area; not observed during surveys and not expected to occur.
Anniella pulchra Northern California legless lizard	State: CSC	March - November	Sandy or loose loamy soils under coastal scrub or oak trees. Soil moisture essential.	No / Yes	Suitable habitat in the loose soils associated with oak trees in the survey area.
Antrozous pallidus Pallid bat	State: CSC	October - February	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. May roost in hollow trees and old buildings.	No / Yes	May roost in hollow oak trees and forage throughout the survey area.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Aquila chrysaetos Golden eagle	State: Fully Protected	January - August	Open country in prairies, tundra, open coniferous forest, and barren areas, especially in hilly or mountainous regions. Nests in large, prominent trees in wooded areas and on cliff ledges.	No / Yes	Species may forage along the open ridge of the survey area; marginal nesting habitat adjacent to survey area.
Ardea herodias Great blue heron	State: Sensitive	March - August	Saltwater and freshwater marshes, sloughs, riverbanks, ponds and lakes. May also forage in grasslands and agricultural fields. Nests high in trees or other raised locations.	No / No	No suitable nesting habitat in the survey area; not observed during surveys and not expected to occur.
Atractelmis wawona Wawona riffle beetle	State: Special Animal	Unknown	Found in riffles of rapid, small to medium clear mountain streams at 600 to 1,525 meters. Typically inhabits submerged aquatic mosses.	No / No	None
Batrachoseps minor Lesser slender salamander	State: CSC	Lay eggs: Fall – Winter	Mesic, deeply shaded slopes with dense leaf litter of variable tree species, including coast live oak, tanbark oak, western sycamore, and poison oak, above 400 m.	No / No	Survey area is outside known species range; not observed during surveys and not expected to occur.
Bombus caliginosus Obscure bumble bee	State: Special Animal	April - October	Grasslands and shrublands within coastal areas from northern Washington to southern California. Select food plant genera include: Baccharis, Cirsium, Lupinus, Acmispon, Grindelia, Phacelia.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Bombus crotchii Crotch bumble bee	State: Candidate	February - October	Open grassland and scrub habitat; nests primarily underground. Generalist forager. Select food plants include members of the *Fabaceae*, *Apocynaceae*, *Asteraceae*, *Lamiaceae*, and *Boraginaceae*. Little known about overwintering sites.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Branchinecta lynchi Vernal pool fairy shrimp	Fed: Threatened	Winter - Spring	Vernal pools and depressions in grasslands.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Buteo regalis Ferruginous hawk	State: Watch List	February - August	Variety of nesting locations including rock outcrops, trees, and ground.	No / No	Survey area is outside of known nesting range; may forage overwinter; not observed during surveys.
Charadrius alexandrines nivosus Western snowy plover	Fed: Threatened State: CSC	March - September	Sandy beaches, salt pond levees, and shorelines of large alkali lakes. Needs friable soil for nesting.	No / No	No suitable nesting habitat in the survey area; not observed during surveys and not expected to occur.
Cicindela hirticollis gravida Sandy beach tiger beetle	State: Special Animal	Unknown	Found in moist sand near the ocean, for example in swales behind dunes or upper beaches beyond normal high tides. Adjacent to non–brackish water near the coast from San Francisco to northern Mexico. Clean, dry light–colored sand in the upper zone.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Coelus globosus Globose dune beetle	State: Special Animal	Unknown	Occupies coastal dunes. Lives in tunnels beneath sand and relies on native vegetation for food.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Corynorhinus townsendii Townsend's big-eared bat	State: CSC	November - May	Mines, tunnels, buildings, and human made structures. May use different day and night roosts. Prefers mesic habitats. Extremely sensitive to human disturbance.	No /No	No suitable roosting habitat in the survey area; not observed during surveys and not expected to occur.
Danaus plexippus Monarch butterfly	Fed: Candidate	Spring	Relies on milkweed and protected stands of trees for roosting, usually blue gum. Found in fields, meadows, weedy areas, marshes, and along roadsides.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Elanus leucurus White-tailed kite	State: Fully Protected	March - August	Savanna, open woodlands, marshes, desert, grassland. Prefer partially cleared fields such as ranches and cultivated fields. They build nests on top of old ones of other species in trees.	No / No	No suitable nesting habitat in the survey area; not observed during surveys and not expected to occur.
Eucyclogobius newberryi Tidewater goby	Fed: Endangered State: CSC	Year-round (April - May)	Brackish (somewhat salty) water in shallow lagoons and in lower stream reaches where the water is fairly still but not stagnant along the pacific coast in California. Prefer a sandy substrate for breeding, but can be found on rocky, mud, and silt substrates.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Helminthoglypta walkeriana Morro shoulderband snail	Fed: Endangered	October - April	Found in association with woody coastal dune scrub and under iceplant.	No / No	Survey area is outside of known species range. No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Linderiella occidentalis California linderiella	State: Special Animal	Rainy season	Seasonal pools in unplowed grasslands with alluvial soils.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Neotoma macrotis luciana Monterey dusky-footed woodrat	State: CSC	February - November	Dense chaparral; hardwood, conifer, and mixed forests; and riparian woodlands. Typically, nests are constructed in inaccessible areas, such as thorny thickets and poison oak patches.	Yes / Yes	Woodrat nests observed throughout the woodland habitat in the survey area.
Oncorhynchus mykiss South-central California coast steelhead	Fed: Threatened State: CSC	February - April	Sacramento-San Joaquin/South Coast flowing waters. Cool, clear water with abundant instream cover, well-vegetated stream margins and relatively stable water flow. Usually lay eggs in fine gravel beds in a riffle above a pool.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Perognathus inornatus psammophilus Salinas pocket mouse	State: CSC	March - July	Dry, open, grassy or weedy ground, and arid annual grasslands, savanna, and desert-shrub associations with sandy washes or finely textured soil. Rarely documented in blue oak savannah.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Phrynosoma blainvillii Blainville's horned lizard	State: CSC	May - September	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	No / Yes	Suitable habitat present in the small portions of open shrubby habitat of the survey area.
Plebejus icarioides moroensis Morro Bay blue butterfly	State: Special Animal	March - July	Found on the immediate coast of San Luis Obispo and Santa Barbara Counties. Silver dune lupine (host plant).	No / No	Survey area is outside of known species range. No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Polyphylla nubile Atascadero June beetle	State: Special Animal	Early summer - June	Known only from sand dunes in Atascadero and San Luis Obispo.	No / No	Survey area is outside of known species range. No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Progne subis Purple martin	State: CSC	April - August	Woodlands and low-elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine provide cover. Often nests in tall, old trees near a body of water.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Puma concolor Mountain lion	State: Candidate	Year-round (usually spring)	From sea level to alpine meadows. Found in nearly all habitats. Excludes Mojave and Colorado deserts and croplands in the Central Valley. Most abundant in riparian areas, and brushy stages of most habitats.	No / Yes	Suitable habitat present in survey area.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Pyrgulopsis taylori San Luis Obispo pyrg	State: Special Animal	Unknown	Freshwater habitats in San Luis Obispo County.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Rana boylii Foothill yellow-legged frog	State: Candidate, CSC	April - July	Streams and rivers with rocky substrate and open, sunny banks, in forest, chaparral, and woodlands. Sometimes found in isolated pools.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Rana draytonii California red-legged frog	Fed: Threatened State: CSC	January - March	Lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation.	No / Yes	Suitable upland/dispersal habitat on site; no critical or suitable aquatic habitat in the survey area.
Spea hammondii Western spadefoot	State: CSC	January - August	Seasonal/vernal pools in coastal scrub, grassland, chaparral, woodland habitat, and open areas with sandy or gravelly soils.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Taricha torosa Coast Range newt	State: CSC	Fall - Spring	Coastal drainages from Mendocino county to San Diego county. Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	No / Yes	Suitable upland/dispersal habitat on site; no aquatic/breeding habitat in the survey area.
Taxidea taxus American badger	State: CSC	Late summer - Early fall	Dry, open fields with friable soil for tunneling and foraging.	No / Yes	Suitable habitat occurs in the open grassy portions of the survey.
Trimerotropis occulens Lompoc grasshopper	State: Special Animal	Unknown	Restricted to western Santa Barbara county in pale gravelly/rocky ground.	No / No	Survey area is outside of known species range. No suitable habitat in the survey area; not

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
					observed during surveys and not expected to occur.
Vireo bellii pusillus least Bell's vireo	Fed: Endangered State: Endangered	March - September	Dense, shrubby vegetation in brushy fields, second-growth forest, woodland, riparian, chaparral, and mesquite brush lands; often near water in arid regions. Nests suspended from branches of small trees or shrubs.	No / No	No suitable habitat in the survey area; not observed during surveys and not expected to occur.
Vulpes macrotis mutica San Joaquin kit fox	Fed: Endangered State: Threatened	December - July	Open, annual grasslands with loose sandy soil.	No / No	Survey area is outside of known species range and county mitigation area. No suitable habitat in the survey area; not observed during surveys and not expected to occur.

[1] List of regionally-occurring special-status species and listing status acquired from CNDDB (CNDDB 2020) and local expert knowledge. See Status Codes.

[2] Life history information obtained from multiple sources, including CaliforniaHerps.com (CAHerps 2020), California's Wildlife (CDFG 2020), and USFWS Environmental Conservation Online System (ECOS) (USFWS 2020).

[3] Species observed during field surveys indicated with **bold** font; species determined to have suitable habitat present on the site, even marginally suitable habitat, indicated with gray highlight. Species highlighted gray are discussed further in the report.

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Appendix C –
Botanical and Wildlife Species Observed

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2281 Kiler Canyon Residential Project

List of Botanical Species Observed on May 04 and July 30, 2020

Family	Scientific Name	Common Name	Origin[1]
Anacardiaceae, Sumac Family	*Toxicodendron diversilobum*	Western poison oak	Native
Apiaceae, Carrot Family	*Daucus pusillus*	Carrot	Native
	Lomatium caruifolium	Caraway leaved lomatium	Native
	Sanicula crassicaulis	Pacific sanicle	Native
	Torilis arvensis	Tall sock-destroyer	Naturalized
	Torilis nodosa	Short sock-destroyer	Naturalized
Apocynaceae, Dogbane Family	*Asclepias fascicularis*	Narrow-leaf milkweed	Native
Asteraceae, Sunflower Family	*Achillea millefolium*	Yarrow	Native
	Agoseris heterophylla	Mountain dandelion	Native
	Baccharis pilularis	Coyote brush	Native
	Carduus pycnocephalus	Italian thistle	Naturalized
	Centaurea melitensis	Maltese star-thistle	Naturalized
	Centaurea solstitialis	Yellow star-thistle	Naturalized
	Corethrogyne filaginifolia	Common sandaster	Native
	Hazardia squarrosa	Saw-toothed goldenbush	Native
	Lagophylla ramosissima	Common hareleaf	Native
	Lasthenia gracilis	Common goldfields	Native
	Layia platyglossa	Tidy-tips	Native
	Logfia gallica	Daggerleaf cottonrose	Naturalized
	Madia gracilis	Gumweed	Native
	Micropus californicus	Q-tips	Native
	Microseris douglasii	Douglas' microseris	Native
	Rafinesquia californica	California chicory	Native
	Stephanomeria sp.	Wire-lettuce	Native
	Uropappus lindleyi	Silver puffs	Native
	Wyethia glabra	Smooth mule ears	Native
Boraginaceae, Borage Family	*Eucrypta chrysanthemifolia*	Spotted eucrypta	Native
Brassicaceae, Mustard Family	*Brassica nigra*	Black mustard	Naturalized
	Hirschfeldia incana	Perennial mustard	Naturalized
	Thysanocarpus curvipes	Common fringe pod	Native
Caprifoliaceae, Honeysuckle Family	*Lonicera* sp.	Honeysuckle	Native
	Symphoricarpos albus var. *laevigatus*	Snowberry	Native
	Symphoricarpos mollis	Creeping snowberry	Native
Caryophyllaceae, Pink Family	*Cerastium glomeratum*	Sticky mouse-ear chickweed	Naturalized

Family	Scientific Name	Common Name	Origin[1]
Convolvulaceae, Morning Glory Family	*Calystegia malacophylla* subsp. *pedicellata*	Jepson's morning glory	Native
Cucurbitaceae, Cucumber Family	*Marah fabacea*	California man-root	Native
Ericaceae, Heath Family	*Arctostaphylos glauca*	Big berry manzanita	Native
Euphorbiaceae, Spurge Family	*Croton setiger*	Turkey-mullein	Native
	Euphorbia spathulata	Warty Spurge	Native
Fabaceae, Legume Family	*Acmispon americanus* var. *americanus*	American bird's foot trefoil	Native
	Acmispon wrangelianus	Chilean trefoil	Native
	Astragalus macrodon	Salinas milkvetch	Native **CRPR 4.3[1]**
	Lupinus albifrons	Silver bush lupine	Native
	Lupinus bicolor	Miniature lupine	Native
	Lupinus microcarpus	Chick lupine	Native
	Lupinus nanus	Sky lupine	Native
	Lupinus succulentus	Arroyo lupine	Native
	Medicago polymorpha	California burclover	Naturalized
	Melilotus indicus	Sourclover	Naturalized
	Trifolium ciliolatum	Foothill clover	Native
	Trifolium hirtum	Rose clover	Naturalized
	Vicia villosa	Hairy vetch	Naturalized
Fagaceae, Oak Family	*Quercus agrifolia*	Coast live oak	Native
	Quercus douglasii	Blue oak	Native
	Quercus lobata	Valley oak	Native
	Quercus wislizeni	Interior live oak	Native
Geraniaceae, Geranium Family	*Erodium cicutarium*	Redstem filaree	Naturalized
Iridaceae, Iris Family	*Sisyrinchium bellum*	Western blue-eyed-grass	Native
Lamiaceae, Mint Family	*Clinopodium douglasii*	Yerba buena	Native
	Lamium amplexicaule	Henbit	Naturalized
	Monardella villosa	Coyote-mint	Native
	Salvia spathacea	California hummingbird sage	Native
	Trichostema lanceolatum	Vinegar weed	Native
Liliaceae, Lily Family	*Calochortus albus*	Fairy-lantern	Native
	Calochortus splendens	Splendid mariposa lily	Native
Linaceae, Flax Family	*Hesperolinon micranthum*	Small flower western flax	Native
	Linum grandiflorum	Flowering flax	Naturalized

Family	Scientific Name	Common Name	Origin[1]
Malvaceae, Mallow Family	*Malva parviflora*	Cheeseweed	Naturalized
Montiaceae, Miner's Lettuce Family	*Claytonia perfoliata*	Miner's lettuce	Native
Myrsinaceae, Myrsine Family	*Lysimachia arvensis*	Scarlet pimpernel	Naturalized
Onagraceae, Evening-primrose Family	*Clarkia* sp.	Clarkia	Native
	Clarkia affinis	Chaparral fairyfan	Native
Orobanchaceae, Broomrape Family	*Castilleja exserta*	Purple owl's-clover	Native
Paeoniaceae, Peony Family	*Paeonia californica*	California peony	Native
Pinaceae, Pine Family	*Pinus sabiniana*	Foothill pine	Native
Plantaginaceae, Plantain Family	*Collinsia bartsiifolia* var. *davidsonii*	Davidson's collinsia	Native
	Collinsia heterophylla	Chinese-houses	Native
Poaceae, Grass Family	*Avena barbata*	Slender wild oat	Naturalized
	Avena fatua	Wild oat	Naturalized
	Bromus diandrus	Ripgut grass	Naturalized
	Bromus hordeaceus	Soft chess	Naturalized
	Bromus rubens	Red brome	Naturalized
	Bromus sitchensis	California brome	Native
	Elymus glaucus	Blue wild-rye	Native
	Festuca microstachys	Small fescue	Native
	Festuca myuros	Rattail sixweeks grass	Naturalized
	Hordeum brachyantherum	Meadow barley	Native
	Hordeum murinum	Wall barley	Naturalized
	Melica californica	California melic	Native
	Stipa lepida	Foothill needle grass	Native
Pteridaceae, Brake Family	*Pentagramma triangularis*	Goldback fern	Native
	Pentagramma triangularis	Goldback fern	Native
Ranunculaceae, Buttercup Family	*Clematis ligusticifolia*	Western virgin's bower	Native
	Ranunculus californicus	Common buttercup	Native
	Ranunculus hebecarpus	Pubescent fruited buttercup	Native
Rhamnaceae, Buckthorn Family	*Ceanothus cuneatus* var. *cuneatus*	Buckbrush	Native
	Ceanothus oliganthus	Hairy ceanothus	Native
	Frangula californica	California coffee berry	Native
Rosaceae, Rose Family	*Heteromeles arbutifolia*	Toyon	Native
	Prunus dulcis	Almond	Naturalized

Family	Scientific Name	Common Name	Origin[1]
	Prunus ilicifolia subsp. *Ilicifolia*	Holly-leafed cherry	Native
Rubiaceae, Madder Family	*Galium andrewsii*	Phlox-leaved bedstraw	Native
	Galium aparine	Goose grass	Native
	Galium californicum	California bedstraw	Native
	Galium parisiense	Wall bedstraw	Naturalized
	Galium porrigens	Climbing bedstraw	Native
Themidaceae, Brodiaea Family	*Dipterostemon capitatus*	Blue dicks	Native
Verbenaceae, Vervain Family	*Verbena lasiostachys*	Western vervain	Native
Viscaceae, Mistletoe Family	*Phoradendron leucarpum* subsp. *tomentosum*	Mistletoe	Native

[1]**Listing Status**: CRPR = California Rare Plant Rank; taxa included on the CRPR list are assigned a listing status based on the degree of rarity (Lists 1A through 4) and threat level (0.1, 0.2, and 0.3), as follows (CNPS 2020c):

Rarity Ranks:

- **List 1A:** presumed extirpated in California, and rare or extinct elsewhere
- **List 1B:** rare, threatened, or endangered in California and elsewhere
- **List 2A:** presumed extirpated in California, but more common elsewhere
- **List 2B:** rare, threatened, or endangered in California, but more common elsewhere
- **List 3:** review list of plants about which more information is needed
- **List 4:** watch list of plants with limited distribution

Threat Ranks:

- **0.1:** seriously threatened in California (> 80% threatened / high degree and immediacy of threat)
- **0.2:** moderately threatened in California (20-80% threatened / moderate degree and immediacy of threat)
- **0.3:** not very threatened in California (< 20% threatened / low degree and immediacy or no current threats known)

2281 Kiler Canyon Road Residential Project

List of Wildlife Species Observed on May 04, 2020 and July 30, 2020

Class	Scientific Name	Common Name
Birds	*Aphelocoma californica*	California scrub-jay
	Baeolophus inornatus	Oak titmouse
	Buteo jamaicensis	Red-tailed hawk
	Callipepla californica	California quail
	Calypte anna	Anna's hummingbird
	Cathartes aura	Turkey vulture
	Corvus corax	Common raven
	Empidonax difficilis	Pacific-slope flycatcher
	Euphagus cyanocephalus	Brewer's blackbird
	Haemorhous mexicanus	House finch
	Meleagris gallopavo	Wild turkey
	Melozone crissalis	California towhee
	Mimus polyglottos	Northern mockingbird
	Myiarchus cinerascens	Ash-throated flycatcher
	Pipilo maculatus	Spotted towhee
	Polioptila caerulea	Blue-gray gnatcatcher
	Psaltriparus minimus	Bushtit
	Sialia mexicana	Western bluebird
	Sitta carolinensis	White-breasted nuthatch
	Sturnus vulgaris	European starling
	Thryomanes bewickii	Bewick's wren
	Toxostoma redivivum	California thrasher
Reptiles	*Pituophis catenifer*	Gopher snake
	Uta stansburiana	Western side-blotched lizard
Mammals	*Neotoma* sp.	Woodrat
	Odocoileus hemionus columbianus	Black-tailed deer
	Tamias merriami	Merriam's chipmunk
	Thomomys bottae	Botta's pocket gopher

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APPENDIX D –
Representative Site Photographs

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Photo 1. View west of Kiler Canyon Road, looking toward the proposed driveway entrance (May 04, 2020).

Photo 2. View southwest of the western-most home site (May 04, 2020).

Photo 3. View west of typical woodland, and grassland habitat on site, near the eastern home site (May 04, 2020).

Photo 4. View south of the eastern home site (May 04, 2020).

Photo 5. View southeast of the proposed solar array location, along southern property boundary (May 04, 2020).

Photo 6. View east of representative habitat between the two home sites (May 04, 2020).

Photo 7. View south of the western property boundary between the proposed project site (left) and agricultural activities on the adjacent property (May 04, 2020).

Photo 8. View of a woodrat midden in the proposed project area (May 04, 2020).

Photo 9. Salinas milkvetch flowers and leaves, observed within one of the home sites (May 04, 2019).

Photo 10. Water tank at the high point of the property near the southwestern corner of the site (May 04, 2020).

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APPENDIX E –
California Natural Diversity Database Survey Form

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CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code NEL20F0007
Quad code 3512056
Occ. no. _____
EO index no. _____
Map index no. _____

Scientific name: *Astragalus macrodon*

Common name: Salinas milk-vetch

Date of field work (mm-dd-yyyy): 05-04-2020

Comment about field work date(s): Observed in flower in May 2020; still detectable in late fruiting condition in late July.

OBSERVER INFORMATION

Observer: Kristen M. Nelson

Affiliation: Terra Verde Environmental Consulting

Address: 3765 South Higuera Street, Suite 102

Email: knelson@terraverdeweb.com

Phone: (702) 596-5038

Other observers:

DETERMINATION

Keyed in: JMT2

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other:

Identification explanation:

Identification confidence: Confident

Species found: Yes **If not found, why not?**

Level of survey effort:

Total number of individuals: 100

Collection? No **Collection number:**

Museum/Herbarium:

PLANT INFORMATION

Phenology:	5 %	95 %	0 %
	vegetative	**flowering**	**fruiting**

SITE INFORMATION

Habitat description: Grassy openings and along the canopy edge of mixed oak woodland and chaparral; soils shallow, rocky, shaley.

Slope: 2-45

Land owner/manager: Private

Aspect: N, NE

Site condition + population viability: Good

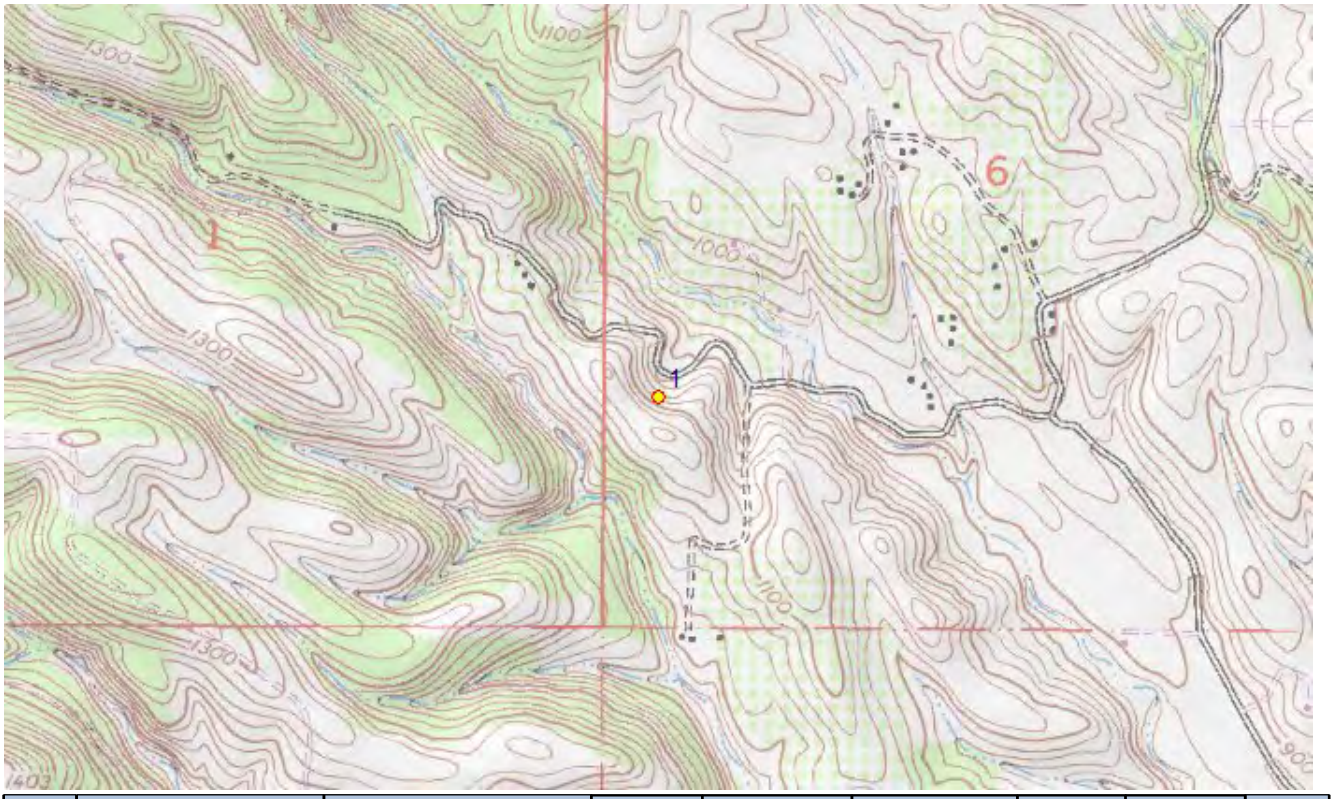
Immediate & surrounding land use: Immediate surrounding habitat is intact mixed oak woodland; adjacent parcels are orchards/vineyards and largely cleared/modified from natural state.

Visible disturbances: None

Threats: Development, non-native species introduction.

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Luis Obispo	Templeton	1093	35.60573	-120.72917	705696	3942594	10

ID	Public Land Survey	Feature Comment
1	M T27S R12E 6	

The mapped feature is accurate within: 10 m

Source of mapped feature: GPS (sub-meter)

Mapping notes:

Location/directions comments: Private property

Attachment(s):