Full Biological Resources Report Over APN 276-100-40-00 County of San Diego, California

[TPM 21176; County Log No. 3910-10-09-003(ER)]

Prepared For:

The County of San Diego Department of Planning and Land Use 5201 Ruffin Road, Suite B San Diego, CA 92123

Project Proponent:

The Gildred Companies 550 W. C. St., Suite 1820 San Diego, CA 92101

Prepared By:

Gretchen Cummings

Cummings and Associates P.O. Box 1209 Ramona, California 92065 (760)440-0349

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Glossary of Terms and Acronyms

ACOE Army Corps of Engineers

BMO The County of San Diego's Biological Mitigation Ordinance

CDFW California Department of Fish and Wildlife

CEQA California Environmental Quality Act

CNDDB California Natural Diversity Database

CNPS California Native Plant Society

CWA Clean Water Act

EPA Environmental Protection Agency

FWS United States Fish and Wildlife Service

MBTA Migratory Bird Treaty Act

MSCP Multiple Species Conservation Program

NCCP Natural Community Conservation Planning

NCMSCP North County Multiple Species Conservation Program

NNG Non-Native Grassland

RPO The County of San Diego's Resource Protection Ordinance

RWCQB Regional Water Quality Control Board

SUMMARY

The Gildred TPM involves the subdivision of an existing parcel into four new lots. Although a wetland occurs along the northwestern edge of the property, the project has been designed to avoid all of the impacts to the wetlands and a 50-foot wetland buffer has been proposed. As proposed, the project, including off-site grading and filling, will permanently impact 0.1-acres of Coast Live Oak Woodland, and 175-square feet (60-lineal feet) of "non-wetland waters of the U.S." will also occur as a result of the widening of the access road to Parcels 3 and 4. Mitigation for the loss of 0.1-acre of Coast Live Oak Woodland and the Oak root protection zone on Parcel 2 (which is outside of the MSCP) will be achieved by preserving 2.07-acres of Coast Live Oak Woodland in on-site open space on Parcels 1 and 2 outside of the MSCP. Permanent and temporary impacts to "non-wetland waters of the U.S." will be mitigated through the establishment of 975-square feet of riparian habitat on-site within proposed open space, or other acceptable option (a 3:1 ratio). By establishing the riparian habitats on-site for the impacts to "non-wetland waters of the U.S.", and by preserving the 2.07-acres of Coast Live Oak Woodland on-site, the potentially significant biological impacts will be mitigated to a level of insignificance.

1.0 INTRODUCTION

1.1 Purpose of the Report

The purpose of this report is to document the biological resources on the project site; identify potential biological resource impacts resulting from the proposed subdivision; and recommend measures to avoid, minimize, and/or mitigate significant impacts consistent with federal, state and local rules and regulations, including the California Environmental Quality Act (CEQA), the County of San Diego's Multiple Species Conservation Program (MSCP) Subarea Plan, Resource Protection Ordinance (RPO), and Biological Mitigation Ordinance (BMO).

1.2 Project Location and Description

The Gildred property is located in the northwestern part of the Ramona community in unincorporated San Diego County (see Figures 1, 2, and 3). The 53.1-acre parcel is specifically found north of, and adjacent to, Highland Trails Drive and east of, and adjacent to, Highland Valley Road (see Figures 2 and 3). The development plans for the property include a subdivision that would create four single-family detached residential lots (see Figures 4a, 4b, 4c, and 4d). Access to the newly created lots on Parcels 1 and 2 will be via Highland Trails Drive. Parcels 3 and 4 will be accessed separately off of Highland Valley Road. The location of the new lots will be adjacent to existing development on the south, and west (see Figure 5).

1.3 Survey Methods

Prior to the initiation of the field surveys on the Gildred property, a search of the California Native Plant Society's on-line database was conducted. A "hit list" of possible sensitive plant species was generated so that the observer could focus the survey efforts to identify if those potential species occurred on-site. The generation of this list required an analysis of the underlying soils as mapped on the Geologic Map of the San Pasqual 7.5' Quadrangle (Hernandez, et. al., 2007) and on the Soil Survey of the San Diego Area (Bowman, 1973).

The general biological information was gathered on the first, second and third visits to the property (1 June 2010, 8 July 2010, and 18 August 2010). The second site visit served multiple purposes; it served as part of the general field survey effort for the property which included the mapping of the RPO wetlands along the northwestern boundary of the site. During the third survey on 18 August, the majority of the general biological information was acquired. During that 18 August visit, the 53.1-acre parcel was surveyed with an effort to inspect the different habitats on-site. A fourth site visit occurred on 23 August 2010 to conduct the formal wetland delineation. Please refer to Appendix A attached to this report for the complete results of the wetland delineation. Given the passage of five years since the last surveys, updated biological surveys were conducted on 18 August 2015.

During every visit, all sign (including track, scat, and others), direct observation, and auditory inputs (such as songs and calls) were utilized to identify the species present. Standard naming references are cited in Section 9.0 of this report. Plant species were generally identified in the field with some material being collected for laboratory identification. The observer for this project (G. Cummings) was equipped with Nikon N70 digital camera, and 12 x 32 binoculars. During the July and August 2010 field dates, wind, air temperature, and humidity were taken with a "TurboMeter" and a "Thermo-Hygro" meter respectively (both instruments available through Forestry Suppliers, Inc.). With these instruments, it was possible to record wind speed to the nearest 0.1 mph, temperature to the nearest10 and humidity to the nearest 0.1 percent. On the most recent visit on 18 August 2015, wind and air temperature were taken with a Kestrel. With this instrument, it was possible to record wind speed to the nearest 0.1 mph, and temperature to the nearest 0.1.

The details of the five biological site visits to the Gildred property are as follows:

	53.1-Acre Gildred Property, TPM 21176										
Date	Purpose of Visit	Times of survey	Observer	Beginning of Observational Period			End of Observational Period				
				Wind	Air Temp	Humidity	Wind	Air Temp	Humidity		
1 June 2010	General bio	1645 to 1715 hours	G. Cummings	Not taken	Not taken	Not taken	Not taken	Not taken	Not taken		

	53.1-Acre Gildred Property, TPM 21176										
Date	Purpose of	Times	Observer	Beginning of	of Observati	onal Period	End of Observational Period				
	Visit	of survey		Wind	Air Temp	Humidity	Wind	Air Temp	Humidity		
8 July 2010	RPO wetland delineation and general bio	1345 to 1445 hours	G. Cummings	0.9 - 5.7 mph	78.6F	37%	«; 3.5 mph	81.0F	36%		
18 Aug 2010	General bio	0730 to 1045 hours	G. Cummings	< 1 mph	86.2F	37%	< 1 mph	93.9F	32%		
23 Aug 2010	Federal wetland delineation	0945 to 1245 hours	G. Cummings	«; 2.7 mph	86.0F	31%	«; 2.4 mph	101.7F	23%		
18 Aug 2015	Update bio studies	0900 to 1145 hours	G. Cummings	< 3.8 mph	75.4F	Not taken	< 3.9 mph	87.2F	Not taken		

1.4 Environmental Setting

The 53.1-acre Gildred property is bounded by Highland Trails Drive to the south and by Highland Valley Road to the west. It contains steep slopes roughly down the eastern/central portion of the site. As a result of the steep slopes, there are a series of drainages, some jurisdictional to the local, state and federal wetland permitting agencies, and some not jurisdictional. The main drainage occurs along the northwestern edge of the property. It is an ephemeral drainage (dry most of the year), but does contain riparian habitat. The majority of the property contains an operating Avocado orchard. However, there are disturbed habitats in the northwest section and along most of the eastern property boundary. These areas appear to have been affected by the 2007 fire in that there are cut Avocado trunks, and charred wood in places. Since these areas were occupied by Avocado trees up until the October 2007 fire (less than 4 years ago), they are mapped as Orchards and Vineyards on Figures 4a, 4b, 4c, and 4d, along with the rest of the Avocado orchard. In addition to the Avocado orchard, there are small patches of native upland and wetland habitats. Generally, the site is extremely rocky with granitic boulders and boulder slabs that are flush with the ground.

The only geological formation underlying the site is Woodson Mountain Granodiorite (Hernandez, et. al., 2007). The overlying biological soils on the property are mapped as (Bowman, et al., 1973):

Acid igneous rock land (AcG) — these soils are found over a majority of the property;

- Vista rocky coarse sandy loam, 15 to 30% slopes (VvE) these soils occur in the northwest corner and along Highland Valley Road;
- Cieneba-Fallbrook rocky sandy loams, 30 to 65% slopes, eroded (CnG2) these soils are found along the northern property boundary within the drainage.

1.4.1 Regional Context

In California, there is a state-wide effort known as the Natural Community Conservation Planning (NCCP) program established to preserve ecosystems, while at the same time allowing for planned development. Locally, there are several jurisdictions that have established plans as part of the NCCP program. The County of San Diego is a participant in the local Multiple Species Conservation Program (MSCP) with an approved Subarea Plan. The northwest portion of the property is located within this County of San Diego MSCP Subarea Plan and is identified as "Unincorporated Areas in the Metro-Lakeside-Jamul Segment" (see Figure 6). As such, the permitting requirements and benefits of that plan apply to the designated MSCP areas on the Gildred property. These "unincorporated areas" are outside of the core and linkage areas that serve as the basis for the MSCP preserve system. The remainder of the site is located within the North County MSCP (NCMSCP) which is not an approved plan at this time. However, there are draft NCMSCP documents which were referred to during the design process for TPM 21176 (see Figure 6). Although conformance with the NCMSCP cannot be determined until the final plan is approved, the project design is intended to conform with the draft plan.

1.4.2 Habitat Types/Vegetation Communities

The 53.1-acre Gildred property contains approximately 1.39-acres of disturbed Diegan Coastal Sage Scrub, 1.16-acres of Disturbed Habitat, 1.4-acres of Mule Fat Scrub, 1.0-acre of Urban/Developed land, 2.37-acres of Coast Live Oak Woodland, 45.68-acres of Orchards and Vineyards, 0.1-acre of Coastal and Valley Freshwater Marsh, and 0.02-acre of non- wetland waters of the U.S. (see Figures 4a, 4b, 4c, and 4d).

Disturbed Diegan Coastal Sage Scrub (Holland Element Code 32500). Approximately 1.39-acres of disturbed Diegan Coastal Sage Scrub (dDCSS) is located in the extreme northeastern and northwestern corners of the site. These areas have been disturbed as a result of the October 2007 fire which seems to have burned a portion of the shrubs. The dDCSS <u>in the northwestern portion of the property</u> is dominated by Deerweed (*Lotus scoparius*), but the defining two shrub species for this category, California Sagebrush (*Artemisia californica*), and California Buckwheat (*Eriogonum fasciculatum*), are also present. The dDCSS in the northeastern portion of the site is dominated by California Sagebrush California Buckwheat and Laurel Sumac (*Malosma laurina*), and has largely recovered from the 2007 fire.

Orchards and Vineyards (Holland Element Code 18100). The majority of the property contains a working Avocado orchard with portions of it burned due to the October 2007 fire (a total of approximately 45.68-acres). As such, there are internal dirt access roads and widespread irrigation. The understory is composed of weedy native and non-native shrubs and Page 10 of 36

herbs, interspersed with boulder outcrops. The boulder outcrops are no more than 8 to 10-feet above the ground and are surrounded by Avocado trees. It should also be mentioned that there are isolated Coast Live Oak trees (*Ouercus agrifolia*) within this vegetation category.

Coastal and Valley Freshwater Marsh (Holland Element Code 52410). There is a drainage whose headwaters originate roughly in the north-central portion of the property. As this drainage drops down across the lower part of Parcel 3, the topography flattens out a bit and a Coastal and Valley Freshwater Marsh occurs in this flatter portion (see Figure 4d). This marsh habitat occupies approximately 0.1-acres and is dominated by Broad-leaved Cattail (*Typha latifolia*).

Urban/Developed (Holland Element Code 12000). The Gildred property is bounded by Highland Trails Drive to the south and by Highland Valley Road to the west. Both roads extend somewhat onto the property and are paved (approximately 1-acre).

Disturbed Habitat (Holland Element Code 11300). The Disturbed Habitat on the Gildred property encompasses approximately 1.16-acres adjacent to Highland Valley Road. It is comprised of compacted dirt with some non-native grasses.

Mule Fat Scrub (Holland Element Code 63310). Approximately 1.4-acres of Mule Fat Scrub occupy the lower part of the drainage described above for the Coastal and Valley Freshwater Marsh. It occurs as a narrow strip roughly parallel to Highland Valley Road in the northwest corner of the site. The native shrubs and trees comprising this riparian habitat include:

Mulefat Baccharis salicifolia Arroyo Willow Salix lasiolepis Black Willow Salix gooddingii

Non-native invasive plants have been introduced as well, such as Tamarisk (*Tamarix* sp.).

Coast Live Oak Woodland (Holland Element Code 71160). Four separate patches of Oak Woodland occur on the Gildred property. These woodlands are dominated by Coast Live Oaks (*Quercus agrifolia*) and occupy approximately 2.37-acres on-site. The three patches occur along Highland Trails Drive, along the northern portion of the pad for Parcel 2, in the northwest portion of Parcel 1, and in the extreme northwest corner of the site along the main drainage (see Figures 4b, 4c, and 4d).

1.4.3 Flora

Sixty-seven plant species were identified on the Gildred property (please see the attached Table 1 for further information). Of the sixty-seven species, fifty of them were native species (approximately seventy-seven percent). However, this number is deceiving in that one of the non-native species is the Avocado trees which occupies have occupied the majority of the site.

1.4.4 Fauna

Generally, the types and diversity of wildlife encountered on the Gildred property were those to be expected given the utilization of the majority of the site as a working Avocado orchard. Six reptile species and five mammal species were noted on the property, while twenty-three bird species were observed during the course of the five site visits (please refer to the attached Table 2 for a complete list of wildlife species observed on-site).

1.4.5 Sensitive Plant Species

One principal goal of the biological survey was to determine the presence or absence of sensitive plant species. Prior to initiation of the field work in 2010, a search was made of the on-line California Native Plant Society Rare and Endangered Plant Inventory to determine those plant species considered sensitive and known to occur within an approximately 10-mile radius of the subject property. This search was updated prior to the field visit in 2015 resulting in a list of seventy-seven species (CNPS, 2015). This list was then augmented with two plants from the "Comprehensive List of Sensitive Species" taken from the County of San Diego scoping letter dated June 4, 2010, and with two plants from a nine quad search of the California Natural Diversity Database (CNDDB). This revised list of eighty-one plant species is presented as Table 3 (the reader's attention is directed to that table for additional information). Each entry in the table has been annotated as to the potential occurrence on site, given the habitats present, specific soil requirements, elevational limits, etc. Of the eighty-one species that are listed, none were found on the property, forty-six are "unlikely", twenty-two species have "low" occurrence potential on the Gildred property, twelve have a "medium" occurrence potential, and one has a "high" occurrence potential. The one "high" occurrence potential species is Ashy Spike-Moss (Selaginella cinerascens). The twelve "medium" occurrence potential plants are:

San Diego Milkvetch Astragalus oocarpus

Southern Tarplant Centromadia parryi ssp. australis

Peninsular Spineflower Chorizanthe leptotheca

Delicate Clarkia Clarkia delicata Ramona Horkelia Horkelia truncata

Large-flowered Leptosiphon Leptosiphon grandifloras

Felt-leaf Monardella Monardella hypoleuca ssp. lanata

California Adder's-Tongue Ophioglossum californicum Fish's Milkwort Polygala cornuta var. fishiae

Engelmann's Oak Quercus engelmannii San Diego County Viguiera Viguiera laciniata Rush-like Bristleweed Xanthisma junceum

Six of these twelve species are perennials or shrubs with above-ground expressions throughout the year and one is a tree species (San Diego Milkvetch, Ramona Horkelia, Fish's Milkwort, Engelmann's Oak, San Diego County Viguiera, and Rush-like Bristleweed). As such, all six

species would be relatively easy to locate during a survey of the property (if they in fact occurred on-site). Two of the remaining six species are rhizomatous herbs (Felt-leaved Monardella and California Adder's-Tongue). The Monardella blooms into August and the Adder's-Tongue blooms from December to June. The last four species are annual herbs (Southern Tarplant, Peninsular Spineflower, Delicate Clarkia, and Large-flowered Leptosiphon). The Southern Tarplant blooms from May to November. The Peninsular Spineflower blooms from April to June. The Delicate Clarkia blooms into June and the Leptosiphon blooms from April to August. As such, the surveys conducted during the June, July and August dates occurred during a period when these medium potential species would have been readily observable.

There is a high probability for Ashy-Spike Moss to occur on the Gildred property. This species was noted just off-site to the east. This <u>spike-moss</u> is on the County's List D plant list and has a Ranking of 4.1 according to the California Native Plant Society.

1.4.6 Sensitive Wildlife Species

Another goal of the biological survey effort was to identify any sensitive wildlife species that occur on, or in the immediate vicinity of, the Gildred property. A list of fifty-two sensitive species known to occur within a ten-mile radius of the subject property was generated from a nine quad search of the CNDDB. That list was then augmented with twenty-three additional species from the "Comprehensive List of Sensitive Species" taken from the County of San Diego scoping letter dated June 4, 2010. Of the total seventy-five sensitive species known to occur within a ten-mile radius of the subject property (see the attached Table 4), one sensitive bird species, the Rufous-crowned Sparrow, two sensitive reptile species, the Orange-throated Whiptail and the Coastal Western Whiptail, and one mammal, the Southern Mule Deer, were observed on-site (see Figure 4d for specific locations and Appendix B for the CNDDB forms). Please note that no CNDDB form was filled out for the Southern Mule Deer because it does not hold any state or federal status as a sensitive species, and is not tracked by the CNDDB.

Rufous-crowned Sparrow. The Rufous-crowned Sparrow (*Aimophila ruficeps* spp. *canescens*) is listed on the CDFW's Watch List, and on the County of San Diego's Group 1 Sensitive Animal Species List in the County Guidelines for Determining Significance (San Diego, County of, 2010a). During the 18 August 2010 site visit, a single individual was heard making the "dear dear" call in the southeast portion of the site.

Orange-throated Whiptail. The Orange-throated Whiptail (*Aspidoscelis hyperythra*) is listed as a California Species of Concern by CDFW (Fish and Wildlife, 2015b), and as a Group 2 Sensitive Animal Species by the County (San Diego, County of, 2010a). Two individual Orange-throated Whiptails were observed in the northwestern portion of the property.

Coastal Western Whiptail. The Coastal Western Whiptail (*Aspidoscelis tigris stejnegeri*) is listed as a Group 2 Sensitive Animal Species by the County (San Diego, County of, 2010a). This lizard has no state or federal status. During the 8 July 2010 visit, three individuals were noted in the northwestern portion of the site.

Southern Mule Deer. The Southern Mule Deer (*Odocoileus hemionus*) is listed as a Group 2 Sensitive Animal Species by the County (San Diego, County of, 2010a). This species has no state or federal status. During the 18 August 2015 visit, tracks assignable to this species were noted in the muddy edges around the marsh.

Thirteen other sensitive wildlife species with either a "medium" or "high" occurrence potential on the Gildred property are as follows. There are eleven species with a "medium" occurrence potential on the property. These eleven species are the Silvery Legless Lizard (*Anniella pulchra pulchra*), Coastal Rosy Boa (*Charina trivirgata roseofusca*), San Diego Banded Gecko (*Coleonyx variegatus abbottii*), Northern Red Diamond Rattlesnake (*Crotalus ruber ruber*), San Diego Horned Lizard (*Phrynosoma coronatum*), Coast Patch-nosed Snake (*Salvadora hexalepis virgultea*), Pallid Bat (*Antrozous pallidus*), Western Red Bat (*Lasiurus blossevillii*), San Diego Desert Woodrat (*Neotoma lepida intermedia*), Southern Grasshopper Mouse (*Onychomys torridus ramona*), and Western Bluebird (*Sialia mexicana*). In addition to the eleven species with "medium" occurrence potential, there are two bird species with "high" occurrence potential. These two species with "high" potential on-site are the Red-shouldered Hawk (*Buteo lineatus*), and the Turkey Vulture (*Cathartes aura*).

Red-shouldered Hawk. The Red-shouldered Hawk (*Buteo lineatus*) is considered a Group 1 Sensitive Animal species in the County Guidelines for Determining Significance (San Diego, County of, 2009). This species has no other state or federal status. A single Red-shouldered Hawk was heard off-site to the west during one of the 2010 site visits.

Turkey Vulture. The Turkey Vulture (*Cathartes aura*) is considered a Group 1 Sensitive Animal species in the County Guidelines for Determining Significance (San Diego, County of, 2009). This species has no other state or federal status. This species is known from the San Pasqual Valley to the north of the Gildred parcel.

Golden Eagle. One of the seventy-five sensitive species known in the area is unlikely to be found on the Gildred property, but requires mentioning at this point. There is a Golden Eagle nest located on the steep granitic cliffs in Bandy Canyon approximately 2,000-feet northeast from the northeast corner of the Gildred property. However, the Gildred property contains an operational Avocado orchard. According to the San Diego County Bird Atlas (Unitt, 2004), "Other factors affecting the eagle are human disturbance, especially rock climbing on nesting cliffs, but also shooting . . . and agriculture (avocado orchards planted near nest sites)." The property is also located in the opposite direction of the Ramona grasslands where the Golden Eagles are anticipated to forage. Although the Gildred property contains some steep slopes, there are no suitable nest sites, such as tall trees or rocky cliff faces. The boulder slabs in the eastern portion of the site are flush with the ground, thus not providing suitable nesting habitat. Utilization of the boulder outcrops within the orchard by raptors, including the Golden Eagle is not anticipated due to the unprotected nature of their occurrence (i.e. they are short outcrops, not protected through inaccessibility due to height, and they are surrounded by the orchard activities, including close human proximity). For the above listed reasons, the Gildred property does not provide suitable nesting or foraging habitat for the Golden Eagle. Since there is no suitable nesting or foraging

habitat for the Golden Eagle on the Gildred property, there is no "take" under the new provisions of the Bald and Golden Eagle Protection Act that went into effect on November 11, 2009 (Fish and Wildlife Service, 2009). These conclusions were affirmed by the USFWS in a letter to Jim Whalen dated March 11, 2011 (see attached Appendix C).

1.4.7 Wetlands/Jurisdictional Waters

As mentioned previously in this report, there are several drainages on the Gildred property as a result of the steep slopes in the east-central portion of the property. There were three drainages that were inspected and delineated in terms of what is or is not jurisdictional under the County of San Diego's Resource Protection Ordinance (RPO), and what is or is not jurisdictional to the Army Corps of Engineers (ACOE) and the California Department of Fish and Wildlife (CDFW). Two of the drainages drain to the north and are tributaries to the Santa Maria Creek. The other drainage occurs parallel to Highland Trails Drive.

The one main drainage that occurs along Highland Valley Road is ephemeral with water remaining in the drainage for only a short time after rain events. The drainage is sandy-bottomed with definable ordinary high water marks (OHWM) and wetland habitats. The other main drainage connecting to Santa Maria Creek appears to originate on the Gildred property (contrary to the U.S.G.S. map in Figure 2). The headwaters begin approximately 500-feet from the northern parcel boundary. There is no riparian habitat in this drainage, nor any OHWMs. The third drainage that parallels Highland Trails Drive and drains to the west appears to collect runoff from the irrigation of the Avocado trees off-site to the south (as evidenced by a culvert underneath Highland Trails Drive), as well as, runoff from Highland Trails Drive itself.

The County of San Diego RPO defines what is and what is not a wetland:

- "(1) Lands having one or more of the following attributes are 'wetlands':
 - (aa). At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
 - (bb). The substratum is predominantly undrained hydric soil; or
 - (cc). An ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.
- (2) Notwithstanding paragraph (1) above, the following shall not be considered 'Wetlands':
 - (aa) Lands which have attribute(s) specified in paragraph (1) solely due to man-made structures (e.g. culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Land Use determines that they:

- (i) Have negligible biological function or value as wetlands;
- (ii) Are small and geographically isolated from other wetland systems;
- (iii) Are not Vernal Pools; and
- (iv) Do not have substantial or locally important populations of wetland dependent sensitive species.

(bb) Lands that have been degraded by past legal land disturbance activities, to the point that they meet the following criteria as determined by the Director of Planning and Land Use:

- (i) Have negligible biological function or value as wetlands even if restored to the extent feasible; and,
- (ii) Do not have substantial or locally important populations of wetland dependent sensitive species."

The main drainage that occurs along Highland Valley Road contains a "predominance of hydrophytes" (one of the criterion for the definition of a wetland in the County's RPO). As such, a 50-foot wetland buffer has been proposed (see Figures 4b and 4d), as well as, a 100-foot Limited Building Zone Easement adjacent to the wetland buffer. Since the northwestern section of the drainage was avoided through design of the project, no formal wetland delineation was conducted in this particular area, just a vegetation mapping of the outer edge of the Willow trees. However, in the upper portions of the drainage where the vegetation changes from marsh habitat to riparian habitat, a driveway to Parcels 3 and 4 is proposed (see Figure 4d). As such, a formal wetland delineation was conducted in this area to determine the amount of impacts resulting from construction of the driveway.

For the purposes of federal regulatory programs, federal wetlands are defined as areas meeting all three of the following criteria:

- 1. A predominance of hydrophytic vegetation; and
- 2. Sufficient hydrology (or water flow) such that there is an anaerobic growing condition in the soil for at least one week during the growing season; and
- 3. A predominance of hydric soils.

In addition to federal wetlands, "non-wetland waters of the U.S." are also protected under the Clean Water Act. In non-tidal situations, such as the drainage areas within the Gildred TPM, "non-wetland waters of the U.S." are delineated by the Ordinary High Water Mark (OHWM) which is defined as, "... the line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural lines impressed on the bank, shelving, changes

in the character of soil, destruction of terrestrial vegetation or presence of litter and debris..." For CDFW purposes, the definition of a wetland is defined by the occurrence of at least one of the following three attributes: 1) at least periodically, the land supports hydrophytes, 2) the substrate is predominantly undrained hydric soil, and 3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year. Also, CDFW (at least the staff members at the San Diego office) utilize the Ordinary High Water Mark (OHWM) as an indication of a wetland.

As a result of project design avoidance, there will be no impacts to federal, state or County RPO wetlands. There will, however, be minimal temporary and permanent impacts to "non-wetland waters of the U.S.". A formal wetland delineation was conducted (see Appendix A) to determine the extent of those impacts. Approximately 150-square feet of "non-wetland waters of the U.S." will be permanently impacted, and approximately 175-square feet of "non-wetland waters of the U.S." will be temporarily impacted by the footprint of the widened access road to Parcels 3 and 4 (again please see the results of the Wetland Delineation in Appendix A). The permanent impact is a result of the actual widening of the access road. The temporary impact is a result of the culvert under the existing access road being removed and replaced as part of the project. For simplicity sake, the temporary and permanent impacts will be combined together as 325-square feet of impacts from this point on in the report.

1.4.8 Habitat Connectivity and Wildlife Corridors

The southern two-thirds of the Gildred property are situated on a west/northwest-facing slope (see Figures 2, 4a, 4b, 4c, and 4d). The northern one-third of the site is generally located on south-facing slopes (again please see Figures 2, 4a, 4b, 4c, and 4d). This topographical layout of the property forms a low point where the two slopes come together that functions like a funnel for wildlife movement (see Figure 5). The majority of the property is currently operated as an Avocado orchard and most of the orchard did not burn during the 2007 fire, unlike the properties to the east and north which burned in their entirety. The on-site areas burned were along the northern and eastern property edges. The site has residential development on two sides of the parcel; the west and the south. To the north are undeveloped lands. Immediately to the east, adjoining the eastern property boundary, is a portion of the former Gildred Ranch, which is part of the Ramona Grasslands preserve managed by the County of San Diego Parks and Recreation. Given the layout of the property and the adjoining preserve to the east, any wildlife movement is expected to occur in the northeasterly-southwesterly fashion along the steep slopes that run through the east-central portion of the site and continue off-site to the south. A combination of biological open space easements and agricultural open space easements are proposed in these locations (see Figures 4a, 4b, 4c, and 4d).

1.5 Applicable Regulations

There are several regulations that apply to the Gildred project in terms of biological resources.

These regulations include the Migratory Bird Treaty Act (federal), the Clean Water Act (federal), the California Environmental Quality Act (state), the California Fish and Game Code (state), the Natural Community Conservation Planning Act (state), the Multiple Species Conservation Program (local), the Resource Protection Ordinance (County), the Biological Mitigation Ordinance (County), the Porter-Cologne Act (state), the Habitat Loss Permit Ordinance (County), and the Bald and Golden Eagle Protection Act (federal).

2.0 Project Effects

The specific design of the Gildred project has potentially significant biological effects to Coast Live Oak Woodland, as well as to non-wetland waters of the U.S. Below is a table detailing the vegetation types and amounts, and the proposed impacts, if any:

Vegetation Impact Summary¹

Vegetative Community	Acreage On-site	Acres Impacted On-site Within the MSCP	Acres Impacted On-site Outside of MSCP	Acres Impact Neutral ²	Acres Preserved On-Site ³
Disturbed Diegan Coastal Sage Scrub (Element Code 32500)	1.39	0.0	0.0	0.59	0.8
Disturbed Habitat (Element Code 11300)	1.16	0.0	0.0	1.16	0.0
Mule Fat Scrub (Element Code 63310)	1.4	0.0	0.0	1.4	0.0
Orchards and Vineyards (Element Code 18100)	45.68	2.0	16.1	1.55	26.03
Coast Live Oak Woodland (Element Code 71160)	2.37	0.0	0.1	0.2	2.07 Outside of MSCP
Coastal and Valley Freshwater Marsh (Element Code 52410)	0.1	0.0	0.0	0.1	0.0
Urban/Developed (Element Code 12000)	1.0	0.0	0.0	0.0	1.0
TOTAL:	53.1	2.0	16.2	5.0	29.9

¹Calculated impacts include those due to grading and fuel modification.

² Per the County of San Diego's Report Format and Content Requirements for Biological Resources, 4th Revision, September 15, 2010, all wetlands and wetland buffers that have been avoided and placed into open space shall be considered "impact neutral". This means that the wetlands and wetland buffers do not count as impacts, but they also do not count towards mitigation requirements.

³ Portions of the site that are located in proposed Open Space, but are outside of the wetland buffer are considered to be preserved. Although the majority of this proposed open space is an avocado orchard, it is believed that the proposed open space areas function as a wildlife corridor.

3.0 Special Status Species

This section pertains to the determination of significant impacts, as a result of the project, to species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service.

3.1 Guidelines for the Determination of Significance

Any of the following conditions would be considered significant:

- A. The project would impact one or more individuals of a species listed as federally or state endangered or threatened.
- B. The project would impact the survival of a local population of a County Group A or B plant species, or a County Group 1 animal species, or a species listed as a state Species of Special Concern.
- C. The project would impact the regional long-term survival of a County Group C or D plant species or a County Group 2 animal species.
- D. The project may impact arroyo toad aestivation or breeding habitat.
- E. The project would impact golden eagle habitat.
- F. The project would result in a loss of functional foraging habitat for raptors.
- G. The project would increase noise and/or nighttime lighting to a level above ambient proven to adversely affect sensitive species.
- H. The project would impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, though smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or an area that supports multiple wildlife species.
- I. The project would increase human access or predation or competition from domestic animals, pests or exotic species to levels that would adversely affect sensitive species.
- J. The project would impact the nesting success of sensitive animals (as listed in the Guidelines for Determining Significance) through grading, clearing, fire fuel modification and/or noise generating activities such as construction.

3.2 Analysis of Project Effects

The proposed project will not result in significant impacts to sensitive species under the Guidelines in Section 3.1 for the Determination of Significance for the following reasons:

- 3.1.A No state or federally listed species would be impacted by the project.
- 3.1.B No County Group A or B plant species were identified on the property. The only Group 1 animal species observed during the survey was the Rufous-crowned Sparrow. With the conditioning of the project to require grading activities to occur outside of the avian

- breeding season, the project will not affect the survival of a local population of this bird species.
- 3.1.C No County Group C or D plant species occur on the property. However, three Group 2 animal species were found on-site, the Orange-throated Whiptail, the Coastal Western Whiptail, and the Southern Mule Deer. As the observations of the Orange-throated Whiptail and the Coastal Western Whiptail were of two and three individuals, respectively, it is anticipated that the site is only occupied by a small population of each. The loss of a small population of these two reptile species is not considered a threat to the long-term survival of the species. The Mule Deer observation was of a few tracks (possibly two or three deer) in the mud on the edges of the marsh. This drainage area may be used by Mule Deer for movement and drinking. Since this area will be preserved in open space, and the observation was only of two or three deer, the project is not considered a threat to the long-term survival of the species as a whole.
- 3.1.D The site contains no breeding or aestivating habitat suitable for the arroyo toad.
- 3.1.E There is a Golden Eagle nest approximately 2,000-feet to the northeast of the northeast corner of the property. However, TPM 21176 will not impact Golden Eagle nesting or foraging habitat for the following reasons. The proximity of the nest to the proposed TPM would indicate a potential for foraging Golden Eagles at the Gildred property. However, the Gildred property in currently in use as an operational Avocado orchard which is a known factor affecting the Golden Eagles in San Diego County (Unitt, 2004). Additionally, the Gildred property is located in the opposite direction of the Ramona grasslands where the Golden Eagles are anticipated to forage. In terms of nest site suitability, the Gildred property does not contain the steep cliff faces or tall trees on steep slopes preferred as nesting sites by the Golden Eagle. The boulder slabs in the eastern portion of the site are flush with the ground and do not provide suitable nest sites.
- 3.1.F The majority of the site currently is operated as an Avocado orchard and no raptors were noted foraging on the site.
- 3.1.G The noise and/or nighttime lighting generated by the addition of four single-family detached homes will not adversely affect sensitive species as long as outdoor lighting is shielded away from open space.
- 3.1.H The project does not contain a core wildlife area.
- 3.1.I The majority of the site currently is operated as an Avocado orchard. As such, the site (both the portion occupied by the active orchard and the inactive portion occupied by the areas disturbed by the 2007 fire) has already been subjected to human access, domestic animal presence, and exotic plant species introductions. The project proposes the construction of four, single-family residences at the periphery of the property with avoidance of wetlands and wetland buffers. There is a potential for an increase in the day to day presence of humans and domesticated pets, but with the proposed fencing and signage around the home sites, the potential intrusion should be reduced to a level that will not adversely affect sensitive species.
- 3.1.J. In order to avoid potential impacts to nesting bird species, the project will be conditioned to require grading activities to occur outside of the avian breeding season.

3.3 Cumulative Impact Analysis

The cumulative analysis included a records search (using the County of San Diego's Kiva database and a Discretionary Project Map for the Ramona Community Planning Area printed June 1, 2010) of the County projects located north of Highland Valley Road to the Poway city limit and west of Rangeland Road to the Poway city limit. Only 1 discretionary project was identified within the vicinity of TPM 21176 with similar impacts to those proposed by TPM 21176 (see Table 5).

Based upon the information found during the discretionary project research, it appears as though there will be no cumulative effects as long as TPM 21176 complies with the RPO, provides appropriate habitat mitigation, and implements avian breeding season avoidance mitigation measures as outlined in this report.

3.4 Mitigation Measures and Design Considerations

The following mitigation measures will be implemented:

- 1. Non-barbed wire fencing will be placed at the edge of the open space with open space signs around each of the home sites.
- 2. Grading, clearing and grubbing shall occur outside of the avian breeding season of January 15 to August 31, unless a qualified biologist has first surveyed the area of disturbance to determine the presence or absence of nesting bird species. If such nesting birds are *not* found, then actions proposed under the plan may proceed during the avian breeding season.
- 3. During construction, no activity shall occur within 500-feet of active raptor nests, unless measures are implemented to minimize the noise and disturbance to those adjacent habitats. Exceptions to the latter measure include cases where surveys confirm that adjacent habitat is not occupied or where noise measurements confirm that construction noise levels are below 60 dBA hourly L_{eq} along the edge of the adjacent habitat. If noise levels exceed this threshold, noise barriers shall be erected to reduce noise to below 60 dBA hourly L_{eq} or the noise-generating activities shall be suspended.

3.5 Conclusions

By implementing the three mitigation measures outlined in Section 3.4 above, the potentially significant impact to breeding birds will be mitigated to a level of insignificance.

4.0 Riparian Habitat or Sensitive Natural Community

This section pertains to the determination of significant impacts, as a result of the project, to riparian habitat or a sensitive natural community. Jurisdictional federal wetlands are discussed in Section 5.0 below.

4.1 Guidelines for the Determination of Significance

Any of the following conditions would be considered significant:

- A. Project-related construction, grading, clearing, or other activities would temporarily or permanently remove sensitive native or naturalized habitat (as listed in Table 5 of the County Guidelines for Determining Significance) on or off the project site.
- B. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by ACOE, CDFW and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.
- C. The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.
- D. The project would increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats.
- E. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.

4.2 Analysis of Project Effects

The only potentially significant effects to riparian or other sensitive habitat per the Guidelines in Section 4.1above are under Section 4.1.A. Under Section 4.1.A, the proposed project will impact 0.1-acre of Coast Live Oak Woodland.

The Gildred project will not result in significant impacts to sensitive habitats under the remaining Guidelines in Section 4.1 for the Determination of Significance for the following reasons:

- 4.1.B There will be no impacts to federal wetlands or wetlands as defined by CDFW or the County RPO. The project design has avoided impacts to these sensitive habitats on-site.
- 4.1.C The project entails construction of four single-family residences which is not anticipated to draw down the groundwater table of 3 feet or more from historical low groundwater levels, especially since the current use of the property is as an operational Avocado orchard which utilizes Ramona Municipal Water District Water, not groundwater (a portion of Avocado orchard will be removed).
- 4.1.D The majority of the site contains an Avocado orchard. There is a potential for an increase in the day to day presence of humans and domesticated pets, but with the proposed fencing and signage around the home sites, the potential intrusion should be reduced to a level that will not adversely affect sensitive habitats.
- 4.1.E. The project includes a 50-foot wetland buffer along the main drainage considered to be an RPO wetland (see Figures 4c and 4d).

4.3 Cumulative Impact Analysis

Please refer to Table 5 for the summary of the cumulative analysis study.

In that:

- TPM 21176 is proposing to preserve 2.07-acres of Coast Live Oak Woodland within preserved open space outside of the MSCP (a >> 3:1 ratio for the 0.1-acres of impacts also outside of the MSCP),
- the past, present and future projects, within the cumulative analysis area, that have or will have impacts to Coast Live Oaks will be or have been mitigated for at either a 3:1 or 2:1 mitigation ratio consistent with the ratios in the County of San Diego Guidelines for Determining Significance for Biological Resources document,

then the project's contribution to a cumulative impact on Coast Live Oaks will be less than cumulatively considerable.

4.4 Mitigation Measures and Design Considerations

The following mitigation measure will be implemented to mitigate the potentially significant impacts to the natural upland and wetlands habitats to a level of insignificance:

4. Mitigation for the loss 0.1-acres of Coast Live Oak Woodland on Parcel 2 (which is outside of the MSCP) will be mitigated <u>in-kind</u> through the on-site preservation of 2.07-acres of Coast Live Oak Woodland within open space (which is also outside of the MSCP).

4.5 Conclusions

The potentially significant impacts resulting from the loss of 0.1-acres of Coast Live Oak Woodland outside of the MSCP will be mitigated to a level of insignificance by preserving 2.07-acres of Coast Live Oak Woodland within proposed open space outside of the MSCP.

5.0 Jurisdictional Wetland and Waterways

Two drainages on-site and one drainage which is both on- and off-site, that are proposed to be filled as a result of build out of TPM 21176, were surveyed to determine whether federal jurisdictional wetlands occur in these areas. Only one of the three drainages were considered to be a federal wetland per the tripartite definition (i.e. hydric soils, predominance of hydrophytic vegetation, and hydrology). This drainage is the main one on-site that contains the marsh and riparian habitats. No parts of the federal wetlands will be impacted. However, there are also "non-wetland waters of the U.S." within this drainage which are also jurisdictional to the ACOE (please see Appendix A for the details of the formal wetland delineation).

5.1 Guidelines for the Determination of Significance

All of the federal wetlands on-site have been avoided through project design. However, impacts to 325-square feet of non-wetland waters of the U.S. are unavoidable. As such, the project will have a substantial adverse effect on federally protected non-wetland waters of the U.S. as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption or other means.

5.2 Analysis of Project Effects

All of the federal wetlands on-site have been avoided through project design and will be preserved in open space (see Figures 4c and 4d). However, approximately 325-square feet (only 60-lineal feet) of non-wetland waters of the U.S. will be impacted due to construction of the access road to Parcels 3 and 4, which is a low enough impact as to not require a permit. An ACOE 404-Permit (Nationwide Permit 29) and RWQCB 401 Certification are anticipated to be required. The Project Proponent has conferred with the CDFW. Due to the low impacts, a Streambed Alteration Agreement (SAA) may not be required. Out of an abundance of caution, the Project Proponent will submit a Notification of Lake or Streambed Alteration to the CDFW, and the CDFW will determine whether a SAA is required.

5.3 Cumulative Impact Analysis

Wetlands must be mitigated at a 3:1 ratio to ensure that there is no net loss. Non-wetland waters of the U.S. may be mitigated at a 1:1 ratio per the County of San Diego Guidelines for Determining Significance for Biological Resources document.

5.4 Mitigation Measures and Design Considerations

The following mitigation measure will be implemented to mitigate the potentially significant impacts to "non-wetland waters of the U.S.":

5. Approximately 975-square feet of riparian habitats will be established within the proposed open space (see Conceptual Revegetation Plan in Appendix D). This represents a 3:1 mitigation ratio for the impacts and is consistent with the ratios in the County of San Diego Guidelines for Determining Significance for Biological Resources document.

5.5 Conclusions

Since the small impacts to "non-wetland waters of the U.S." on-site are proposed to be mitigated for at a 3:1 mitigation ratio, the potentially significant impacts have been reduced to a level of insignificance.

6.0 Wildlife Movement and Nursery Sites

This section pertains to the determination of significant impacts, as a result of the project, to wildlife movement and nursery sites.

6.1 Guidelines for the Determination of Significance

Any of the following conditions would be considered significant:

- A. The project would prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
- B. The project would substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.
- C. The project would create artificial wildlife corridors that do not follow natural movement patterns.
- D. The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site-specific analysis of wildlife movement.
- E. The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.
- F. The project does not maintain adequate visual continuity (i.e. long lines-of-site) within wildlife corridors or linkages.

6.2 Analysis of Project Effects

As described in Section 1.4.8 above, the majority of the Gildred property is operated as an Avocado orchard. Given the layout of the property and the adjoining preserve to the east, any wildlife movement is expected to occur in the northeasterly-southwesterly fashion along the steep slopes that run through the east-central portion of the site and continue off-site to the south and west (see Figure 5). These steep slopes are proposed to be preserved in open space, the width of which ranges between 520 and 940-feet. Also, the ephemeral drainage containing riparian habitat along the northwestern edge of the parcel probably acts as a local wildlife corridor, but since there are only slight impacts to the edges of this habitat, any wildlife movement currently in the drainage is expected to continue. In addition, a 50-foot wetland buffer has been proposed adjacent to this riparian habitat except where the driveway to Parcels 3 and 4 cuts through it. This driveway is only an increase of approximately 14-feet in width from the existing dirt access road. If this area is utilized as a wildlife corridor, it is anticipated that the additional 14-feet to the crossing will not change the usage. This current layout and design for TPM 21176 is consistent with the MSCP Subarea Plan. We also believe that the current layout and design for TPM 21176 would not prevent wildlife access through the area into the preserve lands to the north and east. Although the proposed NCMSCP Subarea Plan maps PAMA only in the northeast, east and southern portions of the site (see Figure 6), we believe that the PAMA should have extended further to the west to incorporate the steep slopes that serve as a funnel for wildlife movement in the area. TPM 21176 has proposed open space over the steep slopes where the wildlife movement occurs, as well as, over the northeast corner of the site slated as PAMA and portions of the south/southwestern portion of the site also slated as PAMA.

The potential impacts to wildlife movement per the Guidelines in Section 6.1 above are potential future impacts under Sections 6.1.A and 6.1.B, and potential increased noise and/or nighttime lighting into a wildlife corridor under Section 6.1.D. The current design of the Gildred project does not interfere with the wildlife movement on the property (see Figure 5) in that the proposed pads for the four lots are located outside of the movement corridor. However, since the lot ownership extends beyond the proposed house pad locations, open space easements are proposed outside of the fuel modification zones to assure that there are no future impacts to the wildlife movement corridor per Sections 6.1.A and 6.1.B. With regard to the potential increased noise and/or nighttime lighting, signs will be posted around the home sites to mitigate for the noise and any outside lights will be shielded away from the wildlife corridor to minimize the nighttime light intrusion.

The Gildred project will not result in significant impacts to wildlife movement or nursery sites under the remaining Guidelines in Section 6.1 for the Determination of Significance for the following reasons:

- 6.1.C The current design of the Gildred project does not interfere with the wildlife movement on the property (see Figure 5) in that the proposed pads for the four lots are located outside of the movement corridor.
- 6.1.E The existing wildlife corridor that occurs on the steep slopes in a northeasterly-southwesterly direction are proposed to be preserved in open space, the width of which ranges between 520 and 940-feet. The ephemeral drainage in the northwestern part of the site that acts as a local wildlife corridor is being avoided with a 50-foot buffer placed adjacent to it. The only exception to this is that the width of the crossing over the drainage will increase by 14-feet in order to construct a driveway to Parcels 3 and 4 that complies with applicable codes.
- 6.1.F The current design of the Gildred project does not interfere with the wildlife movement on the property (see Figure 5) in that the proposed pads for the four lots are located outside of the movement corridor.

6.3 Cumulative Impact Analysis

Since the current design of the Gildred project does not actually interfere with the on-site wildlife movement on the property, and the steep slopes suspected as being part of the wildlife corridor on-site are being preserved in open space, there are no impacts to the wildlife movement in terms of blockage or diversion. In addition, the project design and the preservation of open space on-site will maintain the linkages to the preserve lands immediately to the east of the Gildred project. With regard to the potential increase in noise and/or nighttime lighting, the edges of the home sites will have signage to mitigate for the noise and the outdoor lighting will be shielded away from the wildlife corridor. Therefore, these potential impacts are not believed to be cumulatively considerable.

6.4 Mitigation Measures and Design Considerations

The following mitigation measures will be implemented to mitigate the potentially significant impacts to the existing wildlife corridors on-site:

- 6. Approximately 26.03-acres of orchard functionaling as a wildlife corridor will be preserved on-site as open space. It should be noted that the existing Avocado trees that occur within the proposed open space areas will be maintained per the Fire Protection Plan. As such, an exception for this should be included in the open space easement documents such that the existing Avocado trees are allowed to be maintained, but that no additional Avocado trees are allowed to be planted. An agricultural open space easement will be recorded over portions of the site allowing for agricultural uses including orchards and vineyards.
- 7. Outdoor lighting will be shielded away from the existing wildlife corridors.

6.5 Conclusions

The only part of the Gildred property suspected of aiding in wildlife movement are the steep slopes in the east-central portion of the site, and the ephemeral drainage in the northwestern part of the site. Since the steep slopes are proposed to be preserved in open space at widths ranging between 520 and 940-feet connecting to open space to the east, and the driveway to Parcels 3 and 4 will only increase the width of the crossing over the ephemeral drainage by 14-feet, there are no significant impacts to wildlife movement and none that are believed to be cumulatively considerable. Similarly, the potential increase in noise and nighttime lighting is being mitigated through the placement of signs around the home sites and the requirement to shield outdoor lighting away from the wildlife corridor.

7.0 Local Policies, Ordinances, Adopted Plans

This section pertains to the determination of significant impacts, as a result of the project, with respect to local policies, ordinances and adopted plans.

7.1 Guidelines for the Determination of Significance

Any of the following conditions would be considered significant:

- A. For lands outside of the MSCP, the project would impact coastal sage scrub (CSS) vegetation in excess of the County's 5% habitat loss threshold as defined by the Southern California Coastal Sage Scrub Natural Communities Conservation Planning Process (NCCP) Guidelines.
- B. The project would preclude or prevent the preparation of the subregional Natural Communities Conservation Planning Process (NCCP). For example, the project proposed development within areas that have been identified by the County or resource agencies as

- critical to future habitat preserves.
- C. The project will impact any amount of sensitive habitat lands as outlined in the Resource Protection Ordinance (RPO).
- D. The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the Natural Communities Conservation Planning Process (NCCP) Guidelines.
- E. The project does not conform to the goals and requirements as outlined in any applicable Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.
- F. For lands within the Multiple Species Conservation program (MSCP), the project would not minimize impacts to Biological Resource Core Areas (BRCAs), as defined in the Biological Mitigation Ordinance (BMO).
- G. The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub Natural Communities Conservation Planning Process (NCCP) Guidelines.
- H. The project does not maintain existing movement corridors and/or habitat linkages as defined by the Biological Mitigation Ordinance (BMO).
- I. The project does not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
- J. The project would reduce the likelihood of survival and recovery of listed species in the wild.
- K. The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act).
- L. The project would result in the take of eagles, eagle eggs or any part of an eagle (Bald and Golden Eagle Protection Act).

7.2 Analysis of Project Effects

The only potentially significant effects on local policies, ordinances or adopted plans per the Guidelines in Section 7.1 above are under Sections 7.1.C and 7.1.K. Under Section 7.1.C, sensitive habitat lands do occur on the property and some would be impacted as a result of the proposed development. However, these impacts will be mitigated to a level of insignificance. Under Section 7.1.K, the proposed project could result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs. However, it is recommended that grading for the project should occur outside of the avian breeding season.

The Gildred project will not result in significant impacts to local policies, ordinances or adopted plans under the remaining Guidelines in Section 7.1 above for the Determination of Significance for the following reasons:

- 7.1.A The Diegan Coastal Sage Scrub on the Gildred property is not proposed to be directly disturbed. However, rock drilling/blasting may be required during grading operations. If rock drilling/blasting is required, then this activity will occur outside of the avian breeding season to avoid indirect noise impacts to nesting birds in adjacent habitats, such as the Diegan Coastal Sage Scrub.
- 7.1.B The Gildred property is partially located within an area outside of biological core and

linkage areas under the County of San Diego MSCP Subarea Plan (see Figure 6). The remainder of the property is located within the proposed NCMSCP, portions of which are located within the Pre-Approved Mitigation Area (PAMA) - see Figure 6. The northeastern and southwestern portions of the PAMA are proposed to be preserved in open space. The steep slopes in the middle of the property that serve to "funnel" wildlife in a northeasterly or southwesterly fashion are also proposed in open space. Therefore, the project would not preclude or prevent the preparation of the subregional NCCP as the proposed open space areas (both within the PAMA and outside of the mapped PAMA) would ensure connectivity with the preserve lands to the north and east.

- 7.1.D The DCSS on the Gildred property has been avoided through project design.
- 7.1.E The project does conform to the goals and requirements as outlined in any applicable Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.
- 7.1.F The portion of the Gildred property that is within the County of San Diego MSCP Subarea Plan does contain sensitive habitats and species, and the other portion of the Gildred property that is within the NCMSCP contains proposed PAMA areas, causing the property to be considered a Biological Resource Core Area (BRCA) as defined in the BMO. Given the topographical constraints of the site, the impacts to the BRCA have been minimized to the greatest extent possible. The location of the pads on parcels 1 and 2 will not preclude connectivity to the preserve lands to the north and east as the northeastern and southwestern portions of the PAMA have been proposed as open space, as have the non-PAMA designated slopes that currently function as a wildlife corridor.
- 7.1.G The DCSS on the Gildred property is considered an "Intermediate Potential Value" habitat per the NCCP Guidelines as it is close to higher value habitat to the north. However, it does not link the higher value habitat in the north to higher value habitat in the south as the DCSS on-site is confined to the northeastern property boundary and is adjacent to the orchard.
- 7.1.H The integrity of the two possible wildlife movement corridors on the Gildred property will be maintained through project design avoidance and dedication of open space easements.
- 7.1.I There were no narrow endemic species identified on the Gildred property.
- 7.1.J There were no federal or state listed species identified on the Gildred property.
- 7.1.L Although there is a Golden Eagle nest located in Bandy Canyon approximately 2,000-feet to the northeast of the northeast corner of the property, there is no anticipated "take" to the Golden Eagle under the Bald and Golden Eagle Protection Act. There is no anticipated "take" because the Gildred property does not contain suitable nesting or foraging habitat. The property does not contain steep cliff faces such as those in Bandy Canyon which are the preferred nest site for the eagle, nor are there tall trees on steep slopes on the property. The Gildred property is operated as a working Avocado orchard, a known factor affecting the Golden Eagle in San Diego County according to Unitt (2004). The property is also located in the opposite direction of the Ramona grasslands where the Golden Eagles nesting in Bandy Canyon are anticipated to forage.

7.3 Cumulative Impact Analysis

Any projects that go through the County that could impact migratory birds are conditioned such that any grading, clearing or grubbing activity shall occur outside of the avian breeding season. With this condition, there are no cumulative effects because there are no impacts to migratory birds.

"Sensitive Habitat Lands" are defined in the RPO as, "Land which supports unique vegetation communities, or the habitats of rare or endangered species or sub-species of animals or plants. . . including the area which is necessary to support a viable population of any of the above species in perpetuity, or which is critical to the proper functioning of a balanced natural ecosystem or which serves as a functioning wildlife corridor". Using this definition, almost all of the property would be considered a sensitive habitat land under the RPO. The Sage Scrub, and Coast Live Oak habitats are sensitive upland habitats because they are unique and support two rare species, the wetland and riparian habitats are considered RPO wetlands, and the orchard which was not burned in the 2007 fire currently acts as a wildlife corridor and supports two rare species. The majority of the orchard that functions as a wildlife corridor is being preserved through on-site open space. The RPO wetlands have been completely avoided through project design. The upland habitats that will be unavoidably impacted will be mitigated for as described in the above Section 4.4. Therefore, there are no cumulative impacts anticipated.

7.4 Mitigation Measures and Design Considerations

The following mitigation measures will be implemented to mitigate the potentially significant effects on sensitive habitat lands and migratory birds to a level of insignificance:

- 1. Non-barbed wire fencing will be placed at the edge of the open space with open space signs around each of the home sites.
- 2. <u>Rock drilling/blasting,</u> grading, clearing and grubbing shall occur outside of the avian breeding season of January 15 to August 31, unless a qualified biologist has first surveyed the area of disturbance to determine the presence or absence of nesting bird species. If such nesting birds are *not* found, then actions proposed under the plan may proceed during the avian breeding season.
- 3. During construction, no activity shall occur within 500-feet of active raptor nests, unless measures are implemented to minimize the noise and disturbance to those adjacent habitats. Exceptions to the latter measure include cases where surveys confirm that adjacent habitat is not occupied or where noise measurements confirm that construction noise levels are below 60 dBA hourly $L_{\rm eq}$ along the edge of the adjacent habitat. If noise levels exceed this threshold, noise barriers shall be erected to reduce noise to below 60 dBA hourly $L_{\rm eq}$ or the noise-generating activities shall be suspended.
- 4. Mitigation for the loss of 0.1-acres of Coast Live Oak Woodland on Parcel 2

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- outside of the MSCP will be mitigated through the on-site preservation of approximately 2.07-acres of Coast Live Oak Woodland within the open space located outside of the MSCP.
- 5. Approximately 975-square feet of riparian habitats will be established within the proposed open space. This represents a 3:1 mitigation ratio for the impacts and is consistent with the ratios in the County of San Diego Guidelines for Determining Significance for Biological Resources document.
- 6. Approximately 26.03-acres of orchard functionaling as a wildlife corridor will be preserved on-site as open space by the Homeowner's Association (HOA), or by an alternative method acceptable to the County. It should be noted that the existing Avocado trees that occur within the proposed open space areas will be maintained per the Fire Protection Plan. This will be accomplished through a contract between the HOA and a grove manager. As such, an exception for this should be included in the open space easement documents such that the existing Avocado trees are allowed to be maintained, but that no additional Avocado trees are allowed to be planted. Per the Fire Protection Plan, should sections of the grove be abandoned, removal of dead trees, other dead material, and non-native understory would be required. General grove maintenance will conform to best management practices to keep dead fuel loads low.
- 7. Outdoor lighting will be shielded away from the existing wildlife corridors.

7.5 Conclusions

By implementing the seven mitigation measures outlined in Section 7.4 above, the potentially significant impact to RPO sensitive habitat lands and migratory birds will be mitigated to a level of insignificance.

8.0 Summary of Project Impacts and Mitigation

The areas of vegetation by type within TPM 21176 along with the areas of anticipated effect and mitigation requirements are summarized in the following table:

Vegetation Impact and Mitigation Summary¹

Vegetative Community	Acreage On-site	Acres Impacted On-site Within the MSCP	Acres Impacted On-site Outside of the MSCP	Acres Impact Neutral ²	Acres Preserved On-site ³	Mitigation Ratio	Required Mitigation (acres)	Proposed Mitigation (acres)
Disturbed Diegan Coastal Sage Scrub (Element Code 32500)	1.39	0.0	0.0	0.59	0.8	N/A	None	None
Disturbed Habitat (Element Code 11300)	1.16	0.0	0.0	1.16	0.0	N/A	None	None
Mule Fat Scrub (Element Code 63310)	1.4	0.0	0.0	1.4	0.0	N/A	None	None
Orchards and Vineyards (Element Code 18100)	45.68	2.0	16.1	1.55	26.03	N/A	None	None
Coast Live Oak Woodland (Element Code 71160)	2.37	0.0	0.1	0.2	2.07	3:1	0.3	Preservation of 2.07- acres of Coast Live Oak Woodland on-site
Coastal and Valley Freshwater Marsh (Element Code 52410)	0.1	0.0	0.0	0.1	0.0	N/A	None	None
Urban/Developed (Element Code 12000)	1.0	0.0	0.0	0.0	1.0	N/A	None	None
Totals	53.1	2.0	16.2	5.0	29.9			

¹ Calculated impacts include those due to grading and fuel modification.

²Per the County of San Diego's Report Format and Content Requirements for Biological Resources, 4th Revision, September 15, 2010, all wetlands and wetland buffers that have been avoided and placed into open space shall be considered "impact neutral". This means that the wetlands and wetland buffers do not count as impacts, but they also do not count towards mitigation requirements.

³ Portions of the site that are located in proposed Open Space, but are outside of the wetland buffer are considered to be preserved.

Implementation of the project as proposed will have the following effects on existing biological resources. These anticipated effects are:

- 1. The loss of 0.1-acre impact to Coast Live Oak Woodlands;
- 2. The loss of a small population of Orange-throated Whiptail;
- 3. The loss of a small population of Coastal Western Whiptail;
- 4. The construction of a homes in close proximity to RPO, CDFW, and ACOE wetlands:
- 5. The construction of homes in an area utilized by migratory birds for foraging, and possibly for nesting;
- 6. The temporary loss of 150-square feet of "non-wetland waters of the U.S.";
- 7. The permanent loss of 175-square feet of "non-wetland waters of the U.S.".

Of these effects, all seven can be considered potentially significant. Implementation of the following selected mitigation measures can reduce these seven effects to a level less than significant.

- 1. Non-barbed wire fencing will be placed at the edge of the open space with open space signs around each of the home sites.
- 2. <u>Rock drilling/blasting.</u> grading, clearing and grubbing shall occur outside of the avian breeding season of January 15 to August 31, unless a qualified biologist has first surveyed the area of disturbance to determine the presence or absence of nesting bird species. If such nesting birds are *not* found, then actions proposed under the plan may proceed during the avian breeding season.
- 3. During construction, no activity shall occur within 500-feet of active raptor nesting territories, unless measures are implemented to minimize the noise and disturbance to those adjacent habitats. Exceptions to the latter measure include cases where surveys confirm that adjacent habitat is not occupied or where noise measurements confirm that construction noise levels are below 60 dBA hourly L_{eq} along the edge of the adjacent habitat. If noise levels exceed this threshold, noise barriers shall be erected to reduce noise to below 60 dBA hourly L_{eq} or the noise-generating activities shall be suspended.
- 4. The loss of 0.1-acre of Coast Live Oak Woodland outside of the MSCP will be mitigated <u>in-kind</u> at a 3:1 mitigation ratio through the preservation of 2.07-acres of Coast Live Oak Woodland on-site within proposed open space also outside of the MSCP.

- 5. For the 325-square feet of temporary and permanent impacts to "non-wetland waters of the U.S.", and approximately 975-square feet of riparian habitats will be established within the proposed open space through the implementation of the Conceptual Revegetation Plan attached as Appendix D. This represents a 3:1 mitigation ratio for the impacts and is consistent with the ratios in the County of San Diego Guidelines for Determining Significance for Biological Resources document.
- 6. Approximately 26.03-acres of orchard functionaling as a wildlife corridor will be preserved on-site as open space by the Homeowner's Association (HOA), or by an alternative method acceptable to the County. It should be noted that the existing Avocado trees that occur within the proposed open space areas will be maintained per the Fire Protection Plan. As such, an exception for this should be included in the open space easement documents such that the existing Avocado trees are allowed to be maintained, but that no additional Avocado trees are allowed to be planted. An agricultural open space easement will be recorded over portions of the site allowing for agricultural uses including orchards and vineyards.
- 7. Outdoor lighting will be shielded away from the existing wildlife corridors.

9.0 REFERENCES

- American Ornithologists' Union. 1998. Check-list of North American Birds. 7th Edition. American Ornithologists' Union, Washington, D. C., liv + 829 pp.
- Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., and Wilken, D.H. eds. 2012. The Jepson Manual Vascular Plants of California, 2nd Edition. University of California Press, Berkeley, xxii + 1568 pp.
- Beauchamp, R. Mitchel. 1986. A Flora of San Diego County, California. Sweetwater River Press. National City, Calif. 241 pp.
- Bond, Suzanne I. 1977. An Annotated List of the Mammals of San Diego County, California. San Diego Society of Natural History, Transactions 18(14):229-248.
- Bostic, Dennis L. 1964. The Ecology and Behavior of <u>Cnemidophorus hyperythrus beldingi</u> Cope (Sauria: Teiidae). Master's Thesis, San Diego State University. 112 pp.
- Bowman, Roy H., et al. 1973. Soil Survey of the San Diego Area, California. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.
- California Native Plant Society. 2015. On-line Electronic Inventory (of Rare and Endangered Vascular Plants of California) at http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi. Accessed on 10 August 2015.
- Ernst, Carl H. and Evelyn M. Ernst. 2003. Snakes of the United States and Canada. Smithsonian Books, Washington, DC, ix + 668 pp.

- Fish and Wildlife, California Department of. 2015a. California Natural Diversity Database. Rare Find 5 Commercial Version Updated 6 October 2015. Biogeographic Data Branch, Sacramento, CA.
- Fish and Wildlife, California Department of. 2015b. California Natural Diversity Data Base: Special Animals. The Author, Sacramento, California, 65 pp. [available at http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPAnimals.pdf], edition of July 2015.
- Fish and Wildlife, California Department of. 2015c. California Natural Diversity Data Base: Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication, 144 pp. [available at http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPPlants.pdf], edition of July 2015.
- Fish and Wildlife, California Department of. 2015d. California Natural Diversity Data Base: State and Federally Listed Endangered and Threatened Animals of California. The Author, Sacramento, California, 14 pp. [available at http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/TEAnimals.pdf], edition of July 2015.
- Fish and Wildlife, California Department of. 2015e. California Natural Diversity Data Base: State and Federally Listed Endangered, Threatened, and Rare Plants of California. The Author, Sacramento, California, 7 pp., [available at http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/ TEPlants.pdf], edition of July 2015.
- Flora of North America Editorial Committee, eds. 2006. Flora of North America. Vol. 20. Oxford University Press, New York, N. Y., xxii + 666 pp.
- Grinnell, Joseph and Alden H. Miller. 1944. The Distribution of the Birds of California. Cooper Ornithological Club, Berkeley, California (1986 reprint), 617 pp.
- Grismer, L. Lee. 2002. Amphibians and Reptiles of Baja California. University of California Press, Los Angeles, CA. xiii + 399 pp.
- Hall, E. Raymond. 1981. The Mammals of North America. The Ronald Press, New York. Second edition, Volumes I and II, pp. xv + 1181.
- Hernandez, Janice L., Todd, Victoria R., Busch, Lawrence L., and Tan, Siang S. 2007. Geologic Map of the San Pasqual 7.5' Quadrangle, San Diego County, California: A Digital Database Version 1.0, California Geological Survey. Available at http://www.conservation.ca.gov/cgs/rghm/rgm/Pages/ preliminary_geologic_maps.aspx
- Holland, D.C., and N.R. Sisk. 2000. Habitat use and population demographics of the arroyo toad (*Bufo californicus*) on MCB Camp Pendleton, San Diego County, California 1998-2000. Unpublished Report 43 pp.

- Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, California. iii + 155 pp.
- Jameson, Jr. E. W. and H. J. Peeters. 2004. Mammals of California (Revised Edition). University of California Press, Berkeley. xi + 429 pp.
- Oberbauer, Thomas A. 1996. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Unpublished manuscript, County of San Diego, Department of Planning and Land Use, 7 pp [copies available from the County of San Diego].
- Peeters, Hans, and Pam Peeters. 2005. Raptors of California. University of California Press, Los Angeles, California. xi + 294 pp.
- San Diego, County of. 2004. County of San Diego Biological Mitigation Ordinance (Ordinance Numbers 8845, 9246 and 9632 (New Series)). Document available from the Department of Planning and Land Use, 17 pp. + attachments.
- Reiser, Craig. 2001. Rare Plants of San Diego County. 2001 Edition. Aquafir Press. Unpublished report.
- San Diego County of. 2007. Resource Protection Ordinance (Ordinance Numbers 7968, 7739, 7685, 7631, and 9842 (New Series)). Document available from the Department of Planning and Land Use, 18 pp.
- San Diego, County of. 2010a. County of San Diego Guidelines for Determining Significance and Report Format and Contents for Biological Resources. Fourth Revision. Available from the County's website at http://www.sdcounty.ca.gov/dplu/docs/Biological_Guidelines.pdf.
- San Diego, County of. 2010b. County of San Diego Report Format and Content Requirements for Biological Resources. Fourth Revision. Document available at http://www.sdcounty.ca.gov/dplu/docs/Biological_Report_Format.pdf.
- San Diego, County of. 2010c. County of San Diego Biological Mitigation Ordinance. Document available from Planning and Development Services, 17 pp. + attachments.
- Sibley, David Allen. 2003. The Sibley Field Guide to Birds of Western North America. Alfred A. Knopf, New York, NY, 473 pp.
- Stebbins, Robert C. 2003. A Field Guide to Western Reptiles and Amphibians. 3rd Ed., Houghton Mifflin Company, Boston, Mass., xiii + 533 pp.

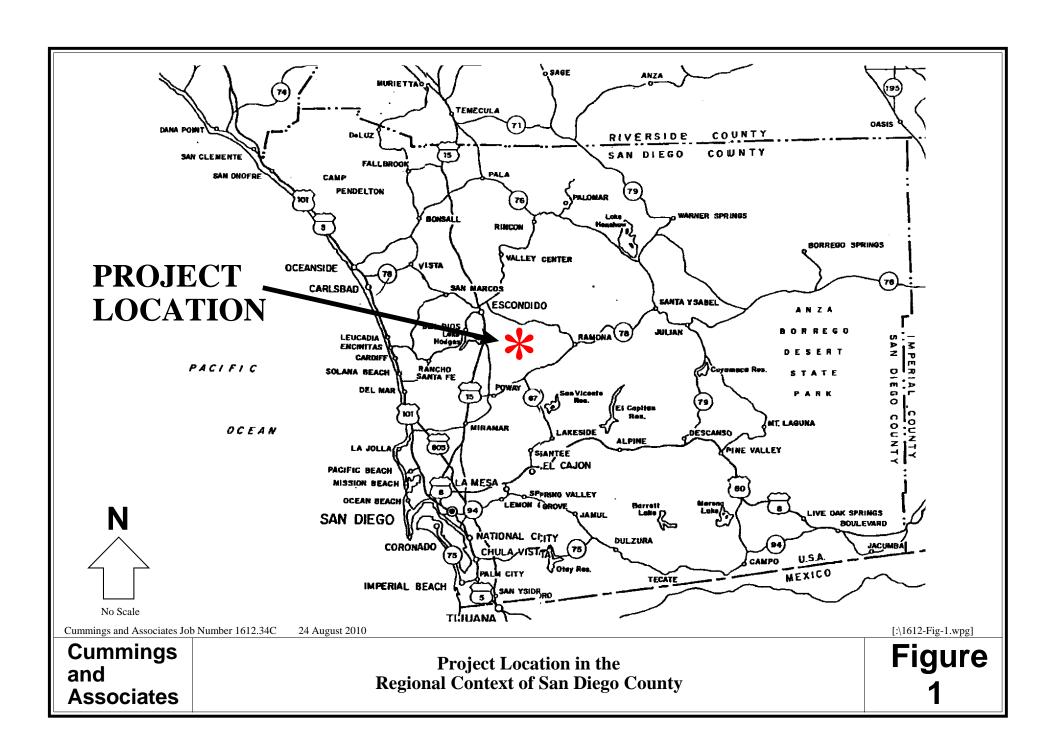
- Unitt, Philip. 2004. San Diego County Bird Atlas. San Diego Natural History Museum, San Diego, Calif. vii + 645 pp.
- U.S. Fish and Wildlife Service. 2005. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arroyo Toad (*Bufo californicus*); Final Rule. Federal Register 70(70):19561-19633.
- U.S. Fish and Wildlife Service. 2009. Eagle Permits; Take Necessary to Protect Interests in Particular Localities; Final Rules. Federal Register 74(175): 46836-46879.
- Williams, Daniel F. 1986. Mammalian species of special concern in California. California Department of Fish and Game, Sacramento, California. 112 pp.
- Wilson, Don E. and Sue Ruff, eds. 1999. The Smithsonian Book of North American Mammals, Smithsonian Institution Press, Washington, D. C., xxv + 750 pp.

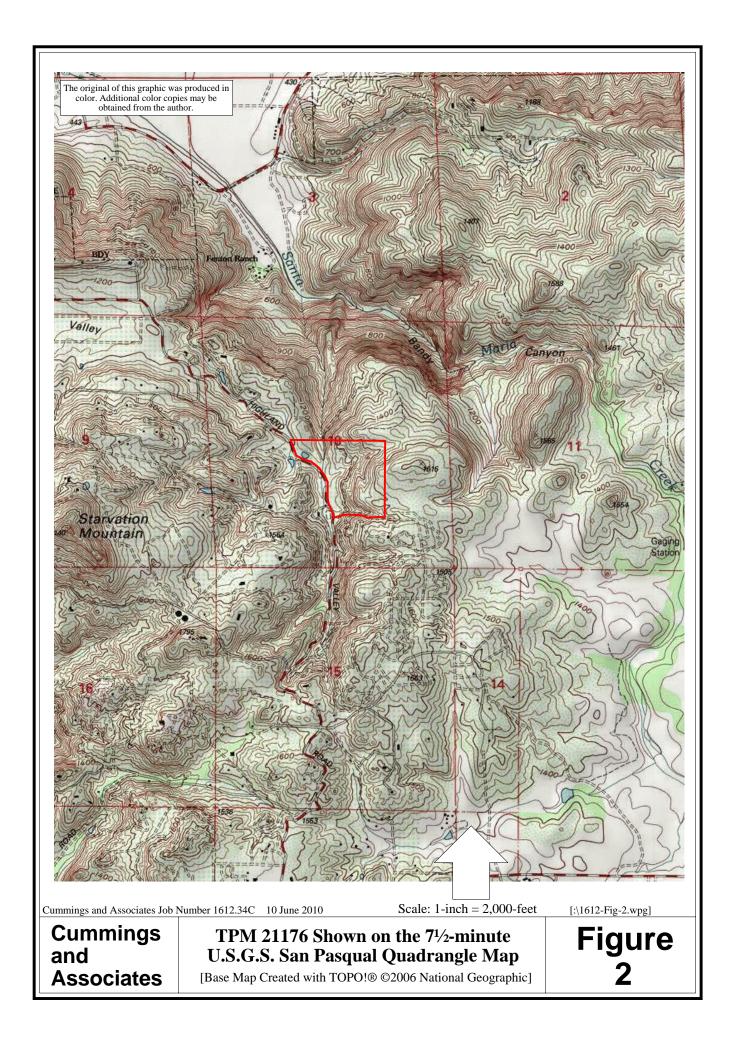
10.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

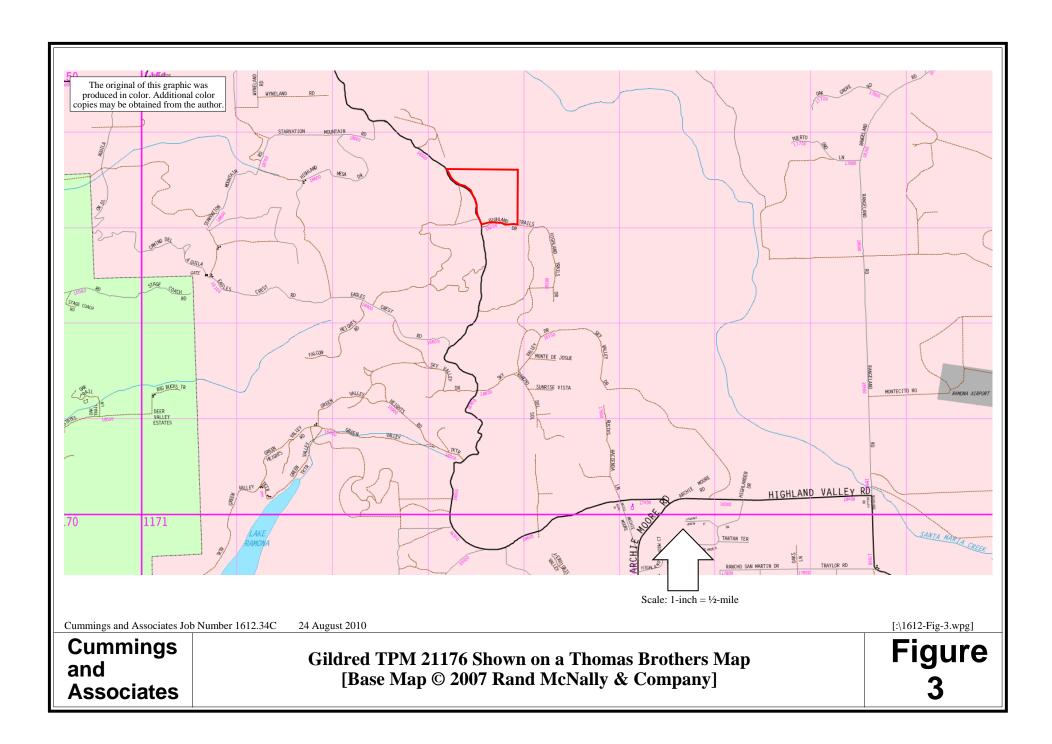
Preparer:

Gretchen Cummings Cummings and Associates P.O. Box 1209 Ramona, CA 92065 (760)440-0349 gretchen.bc@sbcglobal.net

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LEGEND SYMBOL DESCRIPTION SLOPES (2:1 SLOPE, UNLESS SHOWN OTHERWISE) PROJECT BOUNDARY PROPOSED LOT LINE EXISTING LOT LINE PROPOSED EASEMENT EXISTING EASEMENT CUT/FILL DAYLIGHT LINE EXISTING CONTOUR PROPOSED CONTOUR EXISTING OVERHEAD POWER/TELEPHONE LINE PROPOSED WATER MAIN FIRE HYDRANT PROPOSED EXISTING STORM DRAIN STORM DRAIN STORM DRAIN HEADWALL/RIPRAP STORM DRAIN CATCH BASIN EX. WATERCOURSE FLOWLINE EX. LIMITS OF WETLANDS PROP. CONC. DITCH EXISTING POWER POLE PROPOSED FIRE HYDRANT PR. STEEP SLOPE EASEMENT PR. OPEN SPACE EASEMENT 100 YR FLOOD INUNDATION HIGHLAND VALLEY RD GP18 GENERAL PLAN DESIGNATION GENERAL PLAN DELINEATION LINE PROPOSED SEPTIC TIGHT LINE PROJECT SITE PR. BIO-FILTRATION BASIN (BMP) -----SEPTIC FIELD ----11111

PRELIMINARY GRADING PLAN NOTES:

THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY. ONCE THE PROJECT IS COMPLETED RAMONA WATER DISTRICT WILL BE SERVICING ALL OF THE LOTS.

BMP NOTES:

PR. CONCRETE CROSS GUTTER

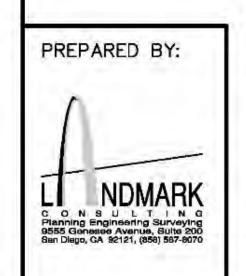
- ALL MANUFACTURED SLOPES SHALL BE HYDROSEEDED WITH NATIVE DRAUGHT TOLERANT PLANTS AND TEMPORARILY IRRIGATED UNTIL VEGETATION IS AT LEAST 75% ESTABLISHED.
- ALL MANUFACTURED PADS SHALL BE STABILIZED WITH STRAW MULCH PER SS-6.
- BIOFILTRATION BASINS WITH PARTIAL RETENTION ARE PROPOSED FOR POLLUTANT AND FLOW-CONTROL BMPS. THESE BMPS WILL BE UNLINED TO PROMOTE INFILTRATION. RUNOFF FROM THE PROPOSED DEVELOPMENT WILL BE DIRECTED INTO THESE BASINS.

BENCHMARK:

BENCHMARK DISC STAMPED "RA 0119" IN CONCRETE MONUMENT WITH STEEL POST MARKER, ON HIGHLAND VALLEY DIRT ROAD, 6.7 MILES EAST OF INTERSECTION WITH POMERADO ROAD WHERE ROAD RUNS THROUGH OAK GROVE IN CANYON 21 FEET EAST OF ROAD IN A ROCKY DRAW 15 FEET WEST OF 18 INCH OAK TREE.

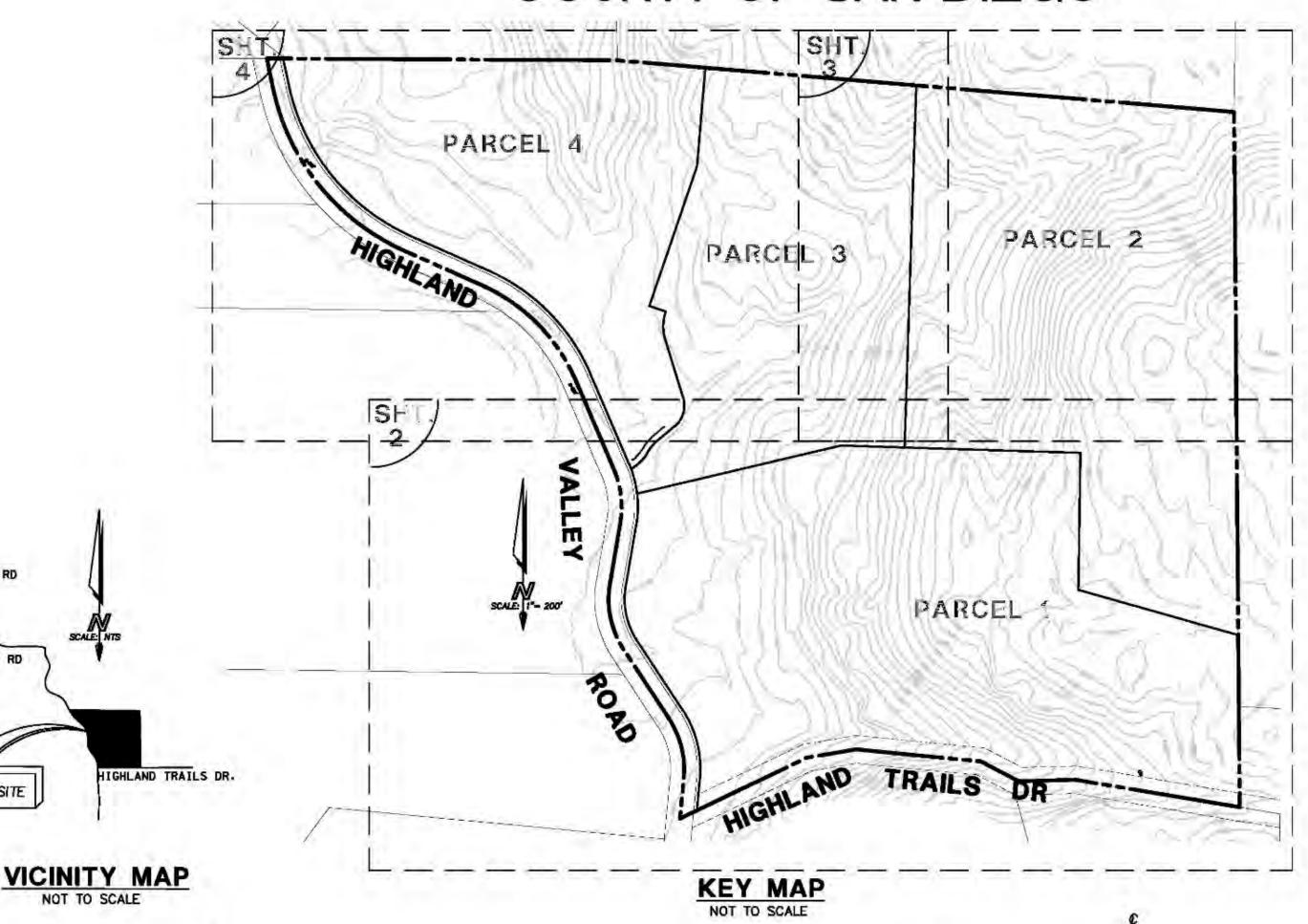
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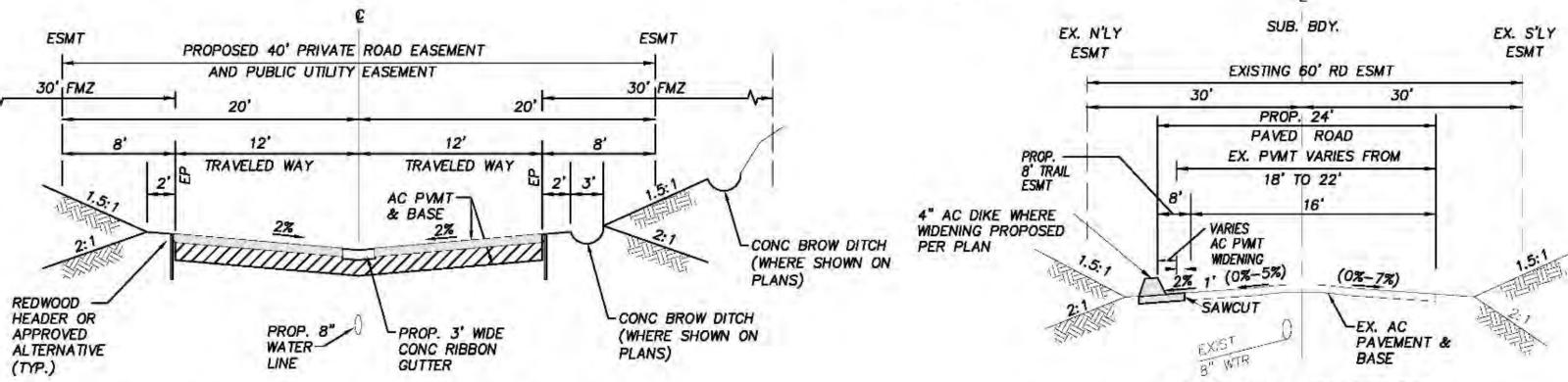
ELEVATION 1284.041 DATUM M.S.L.



-	GRADING	SUMM	ARY
EXCAVAT	ION (1.5:1 MAX)	25,700	C.Y.
FILL	(2:1 MAX)	25,700	C.Y.
IMPORT/	EXPORT	0	C.Y.
SLOPE H	EIGHTS		
EXCAVAT	ION	25' MAX	<
FILL SLO	PES	30' MAX	(

PRELIMINARY GRADING PLAN FOR GILDRED TENTATIVE PARCEL MAP NO. 21176 COUNTY OF SAN DIEGO





TYPICAL SECTION - 40' PRVT. RD. (UNLESS OTHERWISE SHOWN) NO SCALE

EX./EXIST./(E) EXISTING

END VERTICAL CURVE

EDGE OF PAVEMENT

TYPICAL SECTION EXISTING HIGHLAND TRAILS DR. (PVT) NO SCALE

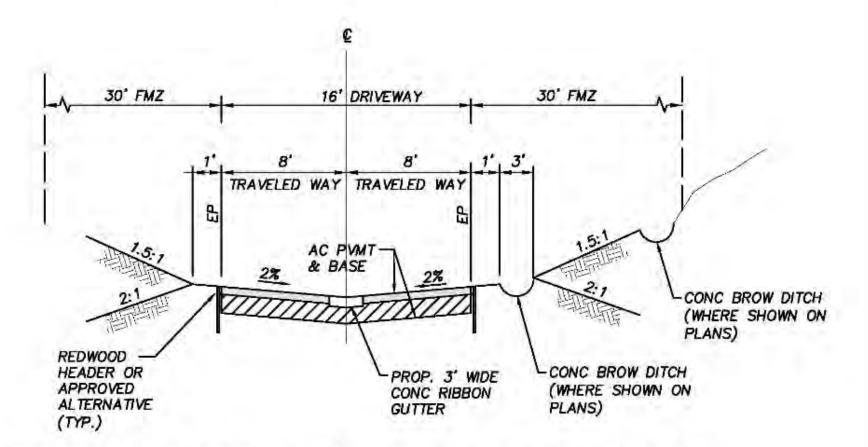
PR. 35' R/W DEDICATION EXISTING 58' ROAD ESMT 25' FMZ VARIES EX. PVMT EX. PVMT VARIES (6'-20') VARIES (0'-20') (0%-10%) TYPICAL SECTION

EX E'LY

EXISTING HIGHLAND VALLEY RD. (PUB)

NO SCALE

EX W'LY ESMT



TYPICAL SECTION - DRIVEWAY SECTION (PVT) NO SCALE

KEY

Sheet 2 of 4 of the Preliminary Grading Plan Figure 4b Sheet 3 of 4 of the Preliminary Grading Plan Figure 4c Sheet 4 of 4 of the Preliminary Grading Plan Figure 4d

Cummings and Associates Job Number 1612.34C 30 May 2017 [1612-Fig-4a-rev2nd.ppp]

Cummings and Associates

Key Map to the Subsequent Three Vegetation Maps Shown on Sheet 1 of 4 of the Preliminary Grading Plan for the Gildred TPM 21176 [Base Map Prepared by Landmark Consulting]

Figure 4a

ABBREVIATIONS ASSESSOR'S PARCEL NO:

C	ASPHALT CONCRETE	ESMT	EASEMENT	MIN.	MINIMUM	S.F.	SQUARE FEET
C.	ACRE	EXP.	EXPIRATION	P	PAD	ST.	STREET
PN	ASSESSOR PARCEL MAP	F.H.	FIRE HYDRANT	PCL	PARCEL	SVC	SERVICE
DY	BOUNDARY	FG	FINISHED GRADE	P	PROPERTY LINE	SWR	SEWER
LDG.	BUILDING	FMZ	FUEL MANAGEMENT ZONE	PI	POINT OF INSTERSECTION	S/W(SDWK)	
VC	BEGIN VERTICAL CURVE	FS	FINISHED SURFACE	PM	PARCEL MAP	TPM	TENTATIVE PARCEL MAP
&G	CURB AND GUTTER	GEN.	GENERAL	PR./PROP.	PROPOSED	T.1.	TRAFFIC INDEX
MP	CORREGATED METAL PIPE	GP	GENERAL PLAN	PUB.	PUBLIC	TYP.	TYPICAL
ONC.	CONCRETE	H/HT.	HEIGHT	PVT.	PRIVATE	VC	VERTICAL CURVE
T.	COURT	HP	HIGH POINT	RD.	ROAD	WTR	WATER
	CENTERLINE	IE	INVERT ELEVATION	R/W	RIGHT OF WAY	W/	WITH
R	DRIVE	INV.	INVERT		STORM DRAIN		
WG	DRAWING	LBZ	LIMITED BUILDING ZONE	SD	STURM DRAIN		
a frame	(/c) cucruic						

OVERHEAD

MAXIMUM

MAX.

276-100-40 OWNER:

SITE ADDRESS OWNER'S ADDRESS GILDRED BUILDING CO. HIGHLAND VALLEY RD 550 WEST C STREET RAMONA, CA. 92065 SAN DIEGO, CA. 92101 (619)-232-6433

GREGG HAGGART DATE

ENGINEER OF WORK:

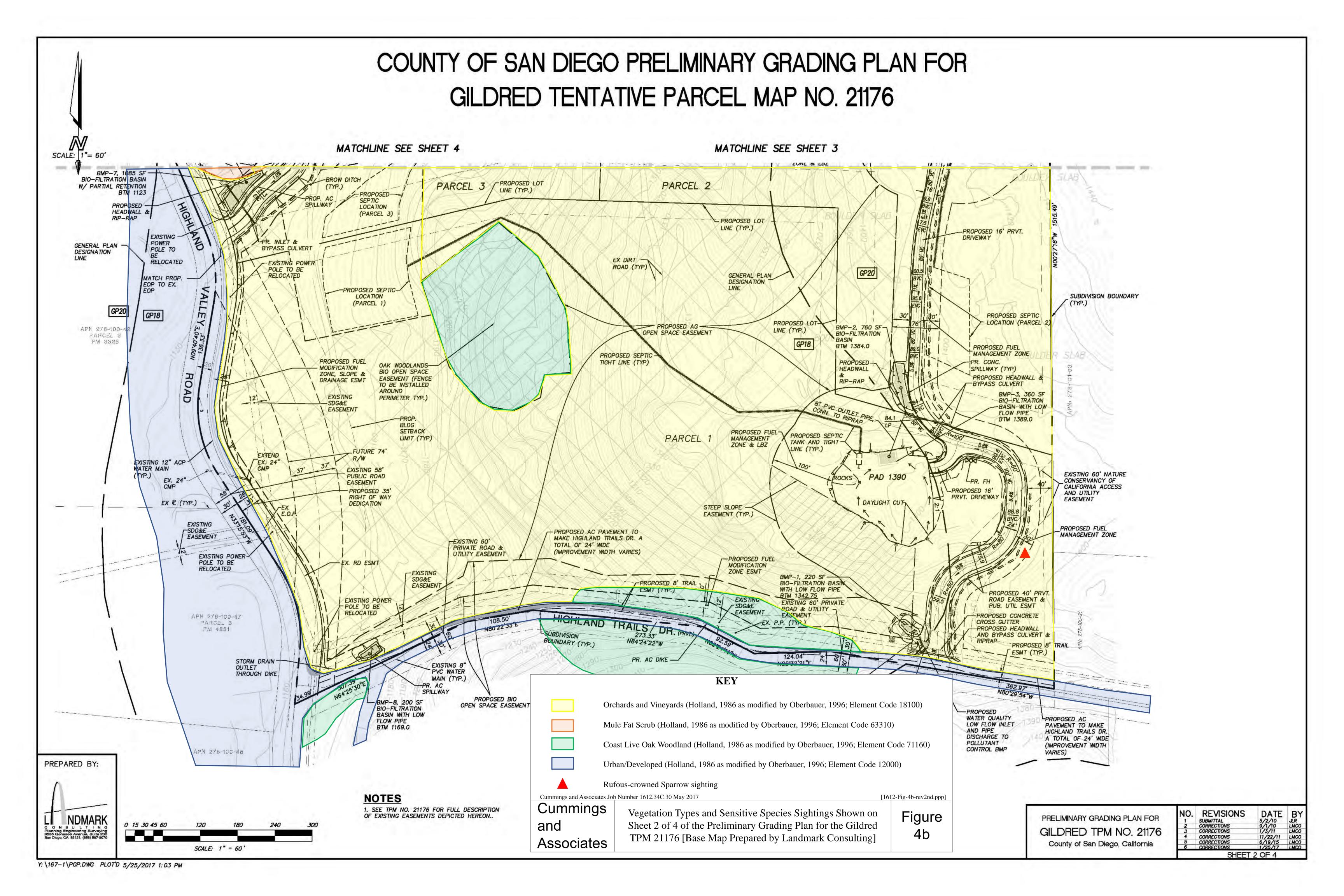
LANDMARK CONSULTING 9555 GENESEE AVENUE, SUITE 200 SAN DIEGO, CA 92121 PHONE: (858) 587-8070 FAX: (858) 587-8750

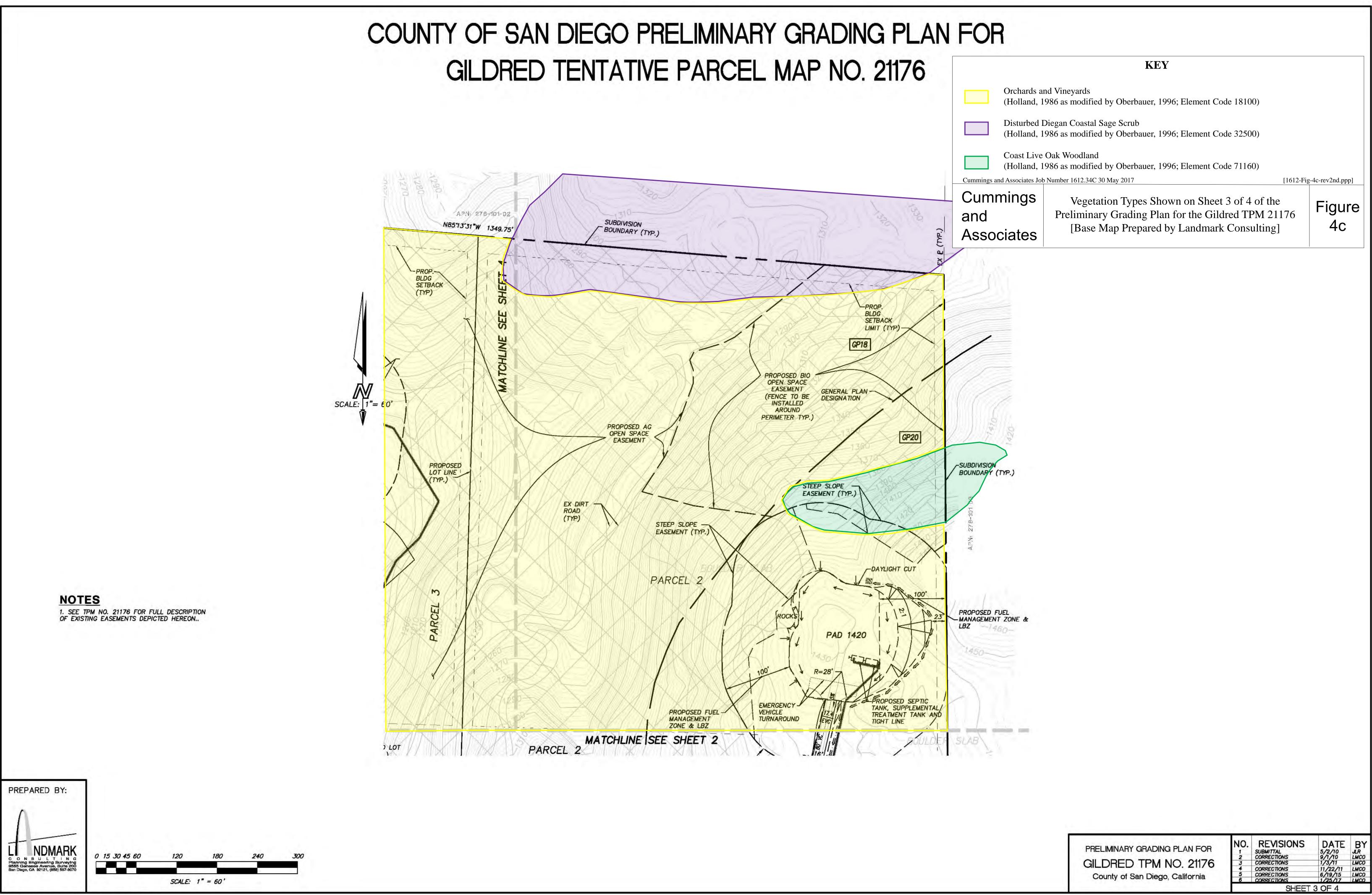


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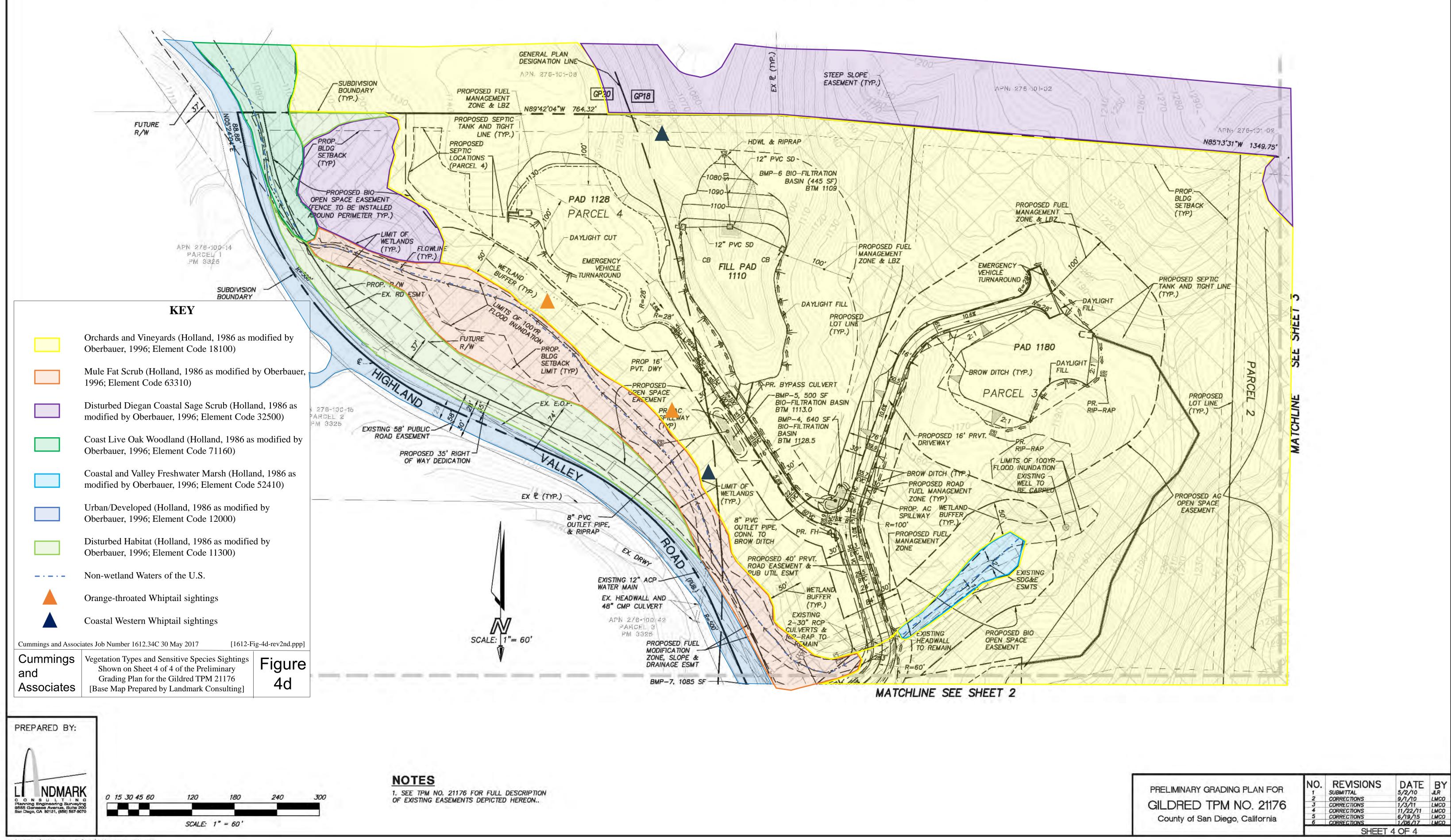
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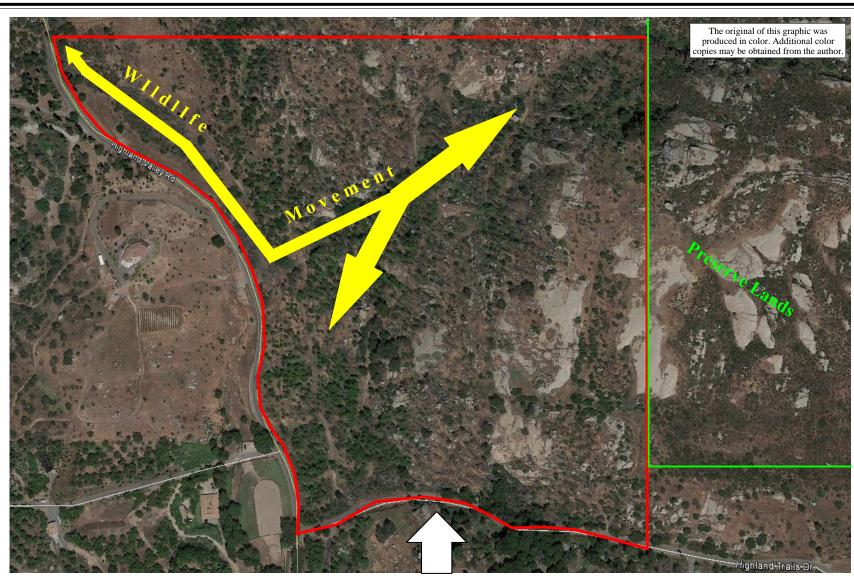
DATE BY
5/2/10 JLR
9/1/10 LMC0
1/3/11 LMC0
11/22/11 LMC0
6/19/15 LMC0
1/25/17 LMC0 NO. REVISIONS CORRECTIONS CORRECTIONS SHEET 1 OF 4





COUNTY OF SAN DIEGO PRELIMINARY GRADING PLAN FOR GILDRED TENTATIVE PARCEL MAP NO. 21176





Cummings and Associates Job Number 1612.34C

10 August 2015

Scale: 1-inch = 300-feet

[:\1612-Fig-5-rev2nd.wpg]

Cummings and Associates

Surrounding Land Uses and Wildlife Movement Shown on an Aerial Photo of the Gildred TPM 21176 [Base Map © 2015 Google; Imagery Date 4/14/2015] Figure 5

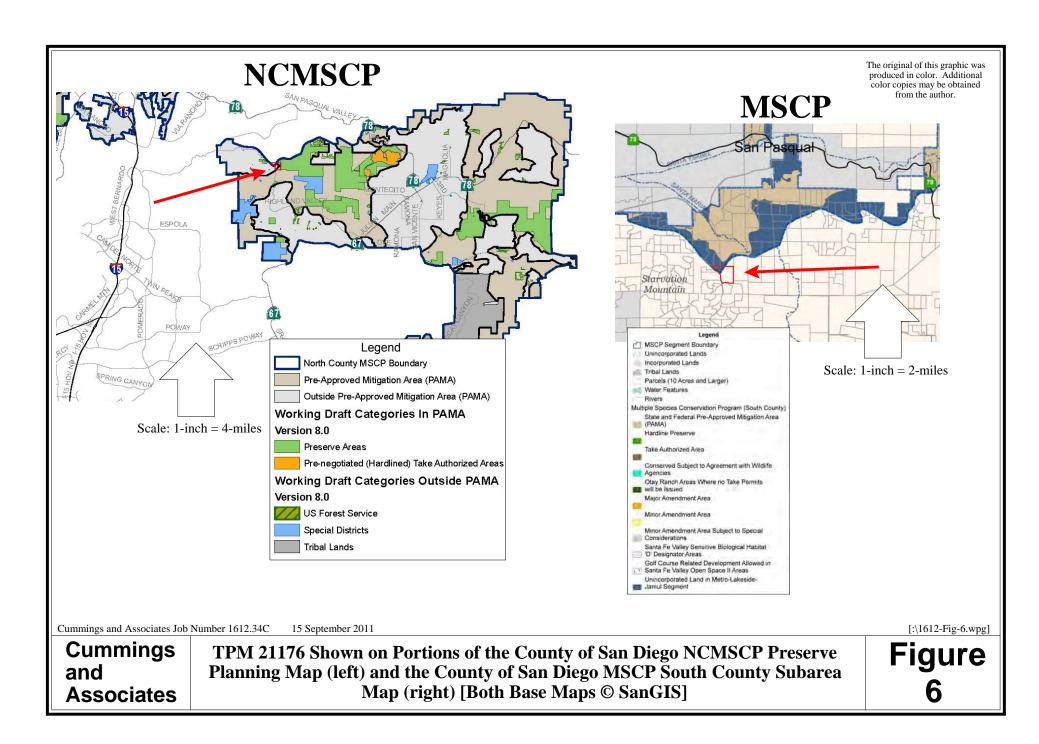


Table 1

Vascular Plants Observed on the Gildred TPM 21176 County of San Diego, California

Scientific Name Common Name	Native (N) or Introduced (I)	Vegetative Community ¹	Occurrence On-site
Adenostoma fasciculatum Chamise	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, localized in the southeast portion of the site.
Ambrosia psilostachya Western Ragweed	N	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Infrequent, scattered in the northwest portion of the site and in a large patch in the southeast corner of the property.
Anagallis arvensis Scarlet Pimpernel	I	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Infrequent, seen at scattered locations through the property.
Antirrhinum nuttallianum Nuttall's Snapdragon	N	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Frequent, but localized mostly around boulder outcrops.
Artemisia californica California Sagebrush	N	Disturbed Diegan Coastal Sage Scrub, Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Infrequent, seen at scattered locations through the property. Not a dominant in the Sage Scrub habitats due to recent fire.

Scientific Name Common Name	Native (N) or Introduced (I)	Vegetative Community ¹	Occurrence On-site
Avena barbata Slender Wild Oat	I	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, but localized at edges of boulder slabs in southeast portion of the site.
Baccharis salicifolia Mule-Fat	N	Mule Fat Scrub	Frequent and concentrated in the drainage along the northwestern edge of the site.
Brickellia californica California Brickellbush	N	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Infrequent, but localized around boulders.
Bromus diandrus Ripgut Grass	I	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, but localized at edges of boulder slabs in southeast portion of the site.
Bromus madritensis ssp. rubens Red Brome	I	Disturbed Diegan Coastal Sage Scrub, Disturbed Habitat, Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Common, seen throughout the site.
Calystegia macrostegia Morning Glory	N	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Frequent, seen scattered throughout the site over plants and forming tangles in some places.
Ceanothus leucodermis Whitebark Lilac	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, but localized in southeast portion of the property.
Centaurea melitensis Tocalote	I	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, but localized in southeast portion of the property.

Scientific Name Common Name	Native (N) or Introduced (I)	Vegetative Community ¹	Occurrence On-site
Chenopodium album Lamb's Quarters	I	Orchard and Vineyard	Frequent, seen in understory beneath Avocado and Oak trees.
Cirsium vulgare Bull Thistle	I	Orchard and Vineyard	Frequent, seen throughout the Orchard.
Cneoridium dumosum Coastal Spicebush	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, but localized in southeast portion of the property.
Conyza canadensis Horseweed	N	Orchard and Vineyard	Common, seen in understory beneath Avocado trees.
Cuscuta ceanothi Canyon Dodder	N	Disturbed Coastal Sage - Chaparral Scrub	Rare on-site, only a few individuals were noted on Laurel Sumac (<i>Malosma laurina</i>) in the southeast portion of the property.
Dicentra chrysantha Golden Ear-Drops	N	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Infrequent, seen at scattered locations in the eastern half of the site.
Deinandra fasciculata Fascicled Tarweed	N	Disturbed Coastal Sage - Chaparral Scrub	Rare on-site, seen only on internal access road near proposed building pad on Parcel 1.
Dudleya attenuata Orcutt's Dudleya	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, localized on shallow soils on boulder slabs in southeast portion of site.
Dudleya pulverulenta Chalk Dudleya	N	Disturbed Coastal Sage - Chaparral Scrub	Rare on-site, scattered individuals noted in southeast portion of the site.

Scientific Name Common Name	Native (N) or Introduced (I)	Vegetative Community ¹	Occurrence On-site
Epilobium ciliatum ssp. ciliatum Willow Herb	N	Disturbed Coastal Sage - Chaparral Scrub and Coastal and Valley Freshwater Marsh	Infrequent, scattered individuals along Highland Trails Drive, and scattered individuals on the edges of the drainage containing marsh vegetation.
Eremocarpus setigerus Doveweed	N	Orchard and Vineyard and Disturbed Habitat	Infrequent in western half of the site, concentrated along the edge of Highland Valley Road.
Eriodictyon crassifolium var. crassifolium Felt-Leaf Yerba Santa	N	Disturbed Coastal Sage - Chaparral Scrub	Rare on-site, a handful of individuals were noted on the northwest-facing slope of the boulder slab on Parcel 2.
Eriogonum fasciculatum California Buckwheat	N	Disturbed Diegan Coastal Sage Scrub and Disturbed Coastal Sage - Chaparral Scrub	Infrequent, seen scatted in the northwest and southeast portions of the site.
Galium angustifolium ssp. angustifolium Narrow-leaved Bedstraw	N	Disturbed Coastal Sage - Chaparral Scrub	Rare on-site, a handful of individuals were seen in the southeast portion of the site.
Helianthemum scoparium Peak Rush Rose	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, seen scatted in the southeast portion of the site.
Hesperoyucca whipplei Our Lord's Candle	N	Disturbed Coastal Sage - Chaparral Scrub	Rare on-site, a few individuals were noted near the boulder slab on Parcel 1.
Heterotheca grandiflora Telegraph Weed	N	Orchard and Vineyard	Common, seen in the understory of the Avocados.

Scientific Name Common Name	Native (N) or Introduced (I)	Vegetative Community ¹	Occurrence On-site
Hirschfeldia incana Short-pod Mustard	I	Disturbed Diegan Coastal Sage Scrub, Disturbed Habitat, Coastal and Valley Freshwater Marsh, Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Common, scattered throughout the site.
Hordeum murinum ssp. leporinum Hare Barley	I	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, but localized at edges of boulder slabs in southeast portion of the site.
Lamarckia aurea Golden-Top	I	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, but localized at edges of boulder slabs in southeast portion of the site.
Lotus purshianus var. purshianus Spanish Clover	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, localized on shallow soils on boulder slabs in southeast portion of site.
Lotus scoparius Deerweed	N	Disturbed Diegan Coastal Sage Scrub and Disturbed Coastal Sage - Chaparral Scrub	Dominant in disturbed Sage Scrub, but infrequent and scattered in the Coastal Sage - Chaparral Scrub mix.
Malacothamnus fasciculatus Chaparral Bushmallow	N	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Dominant in the understory beneath the Avocados, and as a component of the Coastal Sage - Chaparral Scrub mixed habitat in the southeast portion of the site.

Scientific Name Common Name	Native (N) or Introduced (I)	Vegetative Community ¹	Occurrence On-site
Malosma laurina Laurel Sumac	N	Disturbed Diegan Coastal Sage Scrub and Disturbed Coastal Sage - Chaparral Scrub	Infrequent, but a visual dominant in both the Coastal Sage - Chaparral Scrub mixed habitat and the Diegan Coastal Sage Scrub.
Marah macrocarpus Wild Cucumber	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, seen scattered in the southeast portion of the site.
Mimulus aurantiacus San Diego Monkey Flower	N	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Infrequent, seen as scattered individuals in the Coastal Sage - Chaparral Scrub mixed habitat and in the understory of the Avocados.
Mimulus cardinalis Scarlet Monkey Flower	N	Coastal and Valley Freshwater Marsh	Infrequent, but localized in drainage containing marsh habitat.
Navarretia hamata ssp. hamata Hooked Skunkweed	N	Orchard and Vineyard	Infrequent, but localized along the internal access road on Parcel 4.
Nicotiana glauca Tree Tobacco	I	Mule Fat Scrub, Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Infrequent, seen at widely scattered locations.
Oenothera elata ssp. hookeri Great Marsh Evening Primrose	N	Coastal and Valley Freshwater Marsh	Infrequent, concentrated along drainage containing marsh habitat.
Opuntia ficus-indica Indian Fig	I	Coast Live Oak Woodland and Orchard and Vineyard	Rare on-site a few individual clumps were noted in the understory of the Oaks and Avocados.

Scientific Name Common Name	Native (N) or Introduced (I)	Vegetative Community ¹	Occurrence On-site
Opuntia xoccidentalis Western Prickly Pear	N	Disturbed Coastal Sage - Chaparral Scrub	Rare on-site, a few clumps were observed a the periphery of the boulder slab on Parcel 1.
Penstemon spectabilis Showy Penstemon	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, seen widely scattered in the southeast portion of the site.
Persea americana Avocado	I	Orchard and Vineyard and Disturbed Coastal Sage - Chaparral Scrub	Dominant in the working orchard, but also remnant stumps with some resprouting in the Coastal Sage - Chaparral mixed habitat.
Phacelia ramosissima var. latifolia Branching Phacelia	N	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Dominant in understory of Avocados, and also a dominant in the Coastal Sage - Chaparral mixed habitat.
Plantago erecta Dot-seed Plantain	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, seen as localized patch in shallow soil between boulder slabs in southeast portion of the site.
Quercus agrifolia Coast Live Oak	N	Coast Live Oak Woodland, Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Dominant in the Oak Woodland stands along Highland Trails Drive and the edge of the pad on Parcel 2. Scattered individuals were also noted within the Coastal Sage - Chaparral mixed habitat and in the Avocado orchard.
Raphanus sativus Wild Radish	I	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Infrequent, seen at scattered locations.

Scientific Name Common Name	Native (N) or Introduced (I)	Vegetative Community ¹	Occurrence On-site
Rumex crispus Curly Dock	I	Coastal and Valley Freshwater Marsh	Infrequent, but localized in the drainage with the marsh habitat.
Salix gooddingii Black Willow	N	Mule Fat Scrub	Rare on-site, only a few individuals were noted within the riparian habitat in the drainage along the northwestern boundary of the site.
Salix laevigata Red Willow	N	Orchard and Vineyard	Rare on-site, one individual was noted along Highland Trails Drive.
Salix lasiolepis Arroyo Willow	N	Mule Fat Scrub	Dominant within the riparian habitat in the drainage along the northwestern boundary of the site.
Sambucus mexicana Blue Elderberry	N	Orchard and Vineyard	Rare on-site, a handful of individuals were noted at widely scattered locations.
Scrophularia californica California Bee Plant	N	Disturbed Coastal Sage - Chaparral Scrub and Orchard and Vineyard	Frequent, localized around boulders.
Selaginella bigelovii Bigelow's Spike-Moss	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, localized on shallow soils on boulder slabs in southeast portion of site.
Selaginella cinerascens Mesa Spike-Moss	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, localized on shallow soils on boulder slabs in southeast portion of site.
Sonchus oleraceus Common Sow-Thistle	I	Orchard and Vineyard	Frequent in understory of Avocados.

Scientific Name Common Name	Native (N) or Introduced (I)	Vegetative Community ¹	Occurrence On-site
Stachys ajugoides ssp. rigida Hedge Nettle	N	Coastal and Valley Freshwater Marsh	Rare on-site, a handful of individuals were noted within the upper drainage containing the marsh habitat.
Tamarix sp. Tamarisk	I	Mule Fat Scrub	Rare on-site, a handful of individuals were noted within the riparian habitat in the drainage along the northwestern boundary of the site.
Toxicodendron diversilobum Poison Oak	N	Coast Live Oak Woodland	Frequent, but highly concentrated in the understory of the Oaks.
Typha latifolia Broad-leaved Cattail	N	Coastal and Valley Freshwater Marsh	Dominant in the drainage containing the marsh habitat.
Vulpia octoflora var. hirtella Tufted Fescue	N	Disturbed Coastal Sage - Chaparral Scrub	Infrequent, but localized at edges of boulder slabs in southeast portion of the site.
Washingtonia filifera California Fan Palm	N	Disturbed Coastal Sage - Chaparral Scrub, Disturbed Diegan Coastal Sage Scrub, and Orchard and Vineyard	Infrequent, widely scattered individuals.
Xylococcus bicolor Mission Manzanita	N	Disturbed Coastal Sage - Chaparral Scrub	Rare on-site, a handful of individuals were noted on the northwest-facing slope of the boulder slab on Parcel 2.

¹ Holland Element Codes (1986) as modified by Oberbauer (1996) are as follows: Disturbed Diegan Coastal Sage Scrub (Element Code 32500), Disturbed Coastal Sage-Chaparral Scrub (Element Code 37G00), Mule Fat Scrub (Element Code 63310), Disturbed Habitat (Element Code 11300), Orchards and Vineyards (Element Code 18100), Coast Live Oak Woodland (Element Code 71160), Coastal and Valley Freshwater Marsh (Element Code 12000), and Urban/Developed (Element Code 12000).

67 Species

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Table 2

Wildlife Species Observed on, and in the Immediate Vicinity of, the Gildred TPM 21176 County of San Diego, California

Common Name Scientific Name	Vegetative Community ¹ in which the Species was Observed	Observations
	Reptiles	
Orange-Throated Whiptail (Aspidoscelis hyperythrus beldingi)	Orchard and Vineyard	Two individuals were noted in the northwest portion of the site during the 2010 field dates.
Coastal Tiger Whiptail (Aspidoscelis tigris stejnegeri)	Orchard and Vineyard	Three individuals were noted in the northwest portion of the site during the 2010 field dates.
Southern Pacific Rattlesnake (Crotalus helleri)	Disturbed Diegan Coastal Sage Scrub	A single rattlesnake was observed coiled beneath the overhang of a boulder during the 7/8/10 site visit.
Western Fence Lizard (Sceloporus occidentalis longipes)	Disturbed Diegan Coastal Sage Scrub, and Orchard and Vineyard	Numerous Western Fence Lizards were noted along the internal access roads during the 2010 field dates.
Granite Spiny Lizard (Sceloporus orcutti)	Disturbed Diegan Coastal Sage Scrub, Orchard and Vineyard, and Disturbed Coastal Sage - Chaparral Scrub	This lizard is common on-site. It was seen wherever there were boulder outcrops and slabs.

Common Name Scientific Name	Vegetative Community ¹ in which the Species was Observed	Observations
Common Side-blotched Lizard (Uta stansburiana)	Orchard and Vineyard	One Side-blotched Lizard was observed in the southeastern section of the property during the 8/18/10 field visit. Another Sideblotched Lizard was noted during the 8/18/15 site visit.
	Mammals	
Coyote (Canis latrans)	Orchard and Vineyard	A Coyote was seen running up one of the internal access roads during the 8/18/10 site visit and another individual was seen in the same vicinity during the 8/18/15 visit.
Mule Deer (Odocoileus hemionus)	Coastal and Valley Freshwater Marsh	Mule deer tracks were noted in the muddy area near the marsh during the 8/18/15 visit.
Tree Rat (or Black Rat) (Rattus rattus)	Orchard and Vineyard	A single individual was seen amongst the rocks along Highland Trails Drive during the 8/18/10 site visit.
California Ground Squirrel (Spermophilus beecheyi)	Orchard and Vineyard	Seen and heard throughout the Avocado orchard.
Audubon's Cottontail (Sylvilagus auduboni)	Disturbed Coastal Sage - Chaparral Scrub	Two individuals were seen in the southeast corner of the site during the 2010 site visits, as were numerous pellets assignable to this species.
	Birds	
Red-shouldered Hawk (Buteo lineatus)	N/A	A single individual was heard off-site to the west during the 8/18/10 visit.

Common Name Scientific Name	Vegetative Community ¹ in which the Species was Observed	Observations
Red-tailed Hawk (Buteo jamaicensis)	Orchard and Vineyard	Seen as overflights of the property during both the 2010 and 2015 visits.
California Quail (Callipepla californica)	Mule Fat Scrub	A covey of California Quail were seen in the drainage along the northwestern property boundary underneath the riparian canopy during the 8/23/10 visit.
Mourning Dove (Zenaida macroura)	Orchard and Vineyard	Heard and seen in the Avocado trees and on the ground beneath the Avocado trees during the 2010 site visits.
Greater Roadrunner (Geococcyx californianus)	Orchard and Vineyard	Heard clacking its bill in the northeastern portion of the site during the 8/18/15 visit.
Anna'a Hummingbird (Calypte costae)	Orchard and Vineyard and Disturbed Coastal Sage - Chaparral Scrub	Heard and seen at scattered locations during both the 2010 and 2015 visits.
Acorn Woodpecker (Melanerpes formicivorus)	Disturbed Coastal Sage - Chaparral Scrub	A single individual was seen in a dead Avocado tree near the eastern property boundary during the 8/18/10 visit.
Nuttall's Woodpecker (Picoides nuttallii)	Orchard and Vineyard	Heard in the southeastern part of the site during the 8/18/10 and the 8/18/15 site visits.
Western Scrub-Jay (Aphelocoma californica)	Coast Live Oak Woodland	Heard in the Oak stand along Highland Trails Drive during the 8/18/10 visit.
American Crow (Corvus brachyrhynchos)	Orchard and Vineyard and Disturbed Coastal Sage - Chaparral Scrub	Seen as overflights during the 8/18/10 visit.

Common Name Scientific Name	Vegetative Community ¹ in which the Species was Observed	Observations
Canyon Wren (Catherpes mexicanus)	Orchard and Vineyard	Seen and heard along Highland Trails Drive during the 8/18/10 visit. Two Canyon Wrens were heard and seen in the northeastern and southeastern portions of the site during the 8/18/15 field visit.
Bewick's Wren (Thryomanes bewickii)	Orchard and Vineyard and Disturbed Coastal Sage - Chaparral Scrub	Seen and heard at scattered locations during the 8/18/10 visit.
Blue-gray Gnatcatcher (Polioptila caerulea)	Disturbed Coastal Sage - Chaparral Scrub	Heard along the eastern property boundary and off-site to the east during the 8/23/10 visit.
Wrentit (Chamaea fasciata)	Disturbed Diegan Coastal Sage Scrub	Heard in the northeast portion of the property during the 8/18/10 visit.
California Thrasher (Toxostoma redivivum)	Disturbed Diegan Coastal Sage Scrub	Heard in the northeast portion of the property during the 8/18/15 survey.
Phainopepla (Phainopepla nitens)	Disturbed Coastal Sage - Chaparral Scrub	Heard in the southeast portion of the site during the 7/8/10 visit and the 8/18/15 field survey.
Spotted Towhee (Pipilo maculatus)	Orchard and Vineyard and Coast Live Oak Woodland	Heard and seen scratching in leaves beneath Oaks and Avocado trees during the 2010 and 2015 field dates.

Common Name Scientific Name	Vegetative Community ¹ in which the Species was Observed	Observations
California Towhee (Pipilo crissalis)	Orchard and Vineyard and Disturbed Coastal Sage - Chaparral Scrub	Seen and heard in the southeast portion of the site during the 8/18/10 and 8/23/10 site visits. During the 8/18/15 site visit, a pair was heard making the pair reunion duet in the southeast portion of the site.
Rufous-crowned Sparrow (Aimophila ruficeps)	Disturbed Coastal Sage - Chaparral Scrub	Heard the "dear-dear" call of this Sparrow in the southeast corner of the site during the 8/18/10 site visit.
Song Sparrow (Melospiza melodia)	Coastal and Valley Freshwater Marsh	A single individual was seen in the Cattails within the marsh habitat during the 8/18/10 field survey.
Hooded Oriole (Icterus cucullatus)	Disturbed Diegan Coastal Sage Scrub	A single individual was seen flying from one of the Palm trees in the northwest corner of the site during the 7/8/10 site visit.
House Finch (Carpodacus mexicanus)	Orchard and Vineyard and Disturbed Coastal Sage - Chaparral Scrub	Heard and seen throughout the majority of the site during the 2010 site visits.
Lesser Goldfinch (Carduelis psaltria)	Orchard and Vineyard and Mule Fat Scrub	A small flock of Lessers were noted along the western edge of the property during the 8/18/10 site visit. Five years later, during the 8/18/15 visit, a small flock of 6 Lessers were noted foraging in the northeastern portion of the site.

¹ Holland Element Codes (1986) as modified by Oberbauer (1996) are as follows: Disturbed Diegan Coastal Sage Scrub (Element Code 32500), Disturbed Coastal Sage-Chaparral Scrub (Element Code 37G00), Mule Fat Scrub (Element Code 63310), Orchards and Vineyards (Element Code 18100), Coast Live Oak Woodland (Element Code 71160), and Coastal and Valley Freshwater Marsh (Element Code 12000).

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 $Table\ 3$ Sensitive Plant Species Known to Occur Within an $Approximate\ 10\text{-mile Radius}^1\ of\ the\ Gildred\ TPM\ -\ Ramona\ Property$

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Acanthomintha ilicifolia San Diego Thornmint	List A/Rank1B.1/S1/CE/FT	Occurs on heavy clay soils in a variety of habitats at elevations of 32 - 3,159 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973).
Adolphia californica California Adolphia	List B/Rank 2B.1/S2/-/-	Found on sandy/gravelly to clay soils in Coastal Sage Scrub, Chaparral, and Valley and Foothill Grassland habitats at elevations of 148 - 2,435 feet.	N	L	There are sandy soils mapped on the property (Bowman, 1973) and there is a small amount (0.8-acre) of disturbed Diegan Coastal Sage Scrub on the property. The closest CNDDB record is approximately 5.5-miles to the southwest in Battle Mountain Open Space (CDFW, 2015a). NOTE: Another common name is San Diego Adolphia.
Ambrosia pumila San Diego Ambrosia	List A/Rank 1B.1/S1/-/FE	Found in sandy loam or clay soils in Chaparral, Sage Scrub, or Valley and Foothill Grassland habitats at elevations of 65 - 1,366 feet.	N	L	There are sandy loams mapped on the property (Bowman, 1973), and there is a small amount (0.8-acre) of disturbed Diegan Coastal Sage Scrub on the property. The only CNDDB record within a 10-mile radius of the property is approximately 5.9-miles to the northwest (CDFW, 2015a).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Arctostaphylos glandulosa ssp. crassifolia Del Mar Manzanita	List A/Rank 1B.1/S2/-/FE	Found on sandy soils derived from marine sandstones along the coast within Chaparral and Closed-Cone Coniferous Forest habitats at elevations of 0 - 1,201 feet.	N	U	There are no sandy soils derived from marine sandstones on the property (Bowman, 1973).
Arctostaphylos rainbowensis Rainbow Manzanita	List A/Rank 1B.1/S2/-/- CA Endemic	Found on gabbroic soils in Chaparral at elevations of 674 - 2,600 feet.	N	U	There are no gabbroic soils mapped on the property (Bowman, 1973). NOTE: According to Rebman and Simpson (2006), in San Diego County this taxon was previously recognized as <i>Arctostaphylos peninsularis</i> ssp. <i>peninsularis</i> .
Artemisia palmeri San Diego Sagewort	List D/Rank 4.2/S3?/-/-	Found primarily along creeks and drainages on sandy soils within Chaparral, Coastal Scrub, and riparian habitats at elevations of 49 - 3,011 feet.	N	L	Although there are drainages on-site, the closest CNDDB record is 2.5-miles to the southwest of three colonies in 1995 (CDFW, 2015a). NOTE: Another common name is Palmer's Sage.
Asplenium vespertinum Western Spleenwort	List D/Rank 4.2/S4/-/-	Found among boulders and rock outcrops within Chaparral, Coastal Sage, and Cismontane Woodland habitats at elevations of 592 - 3,290 feet.	N	L	There are boulders on the property and there is a small amount (0.8-acre) of disturbed Diegan Coastal Sage Scrub on-site. However, according to the CNPS, there are no records of this species within the San Pasqual quad (CNPS, 2015).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Astragalus deanei Dean's Milkvetch	List A/Rank 1B.1/S1/-/- CA Endemic	Found in Chaparral, Coastal Scrub, Cismontane Woodland, and Riparian Forest habitats at elevations of 246 - 2,287 feet. It is often found on south-facing slopes.	N	L	Although there appear to be moderately suitable habitats on the property, the closest CNDDB record of this species is approximately 14.8-miles to the southeast to the northwest of El Capitan Dam (CDFW, 2015a).
Astragalus oocarpus San Diego Milkvetch	List A/Rank 1B.2/S3/-/- CA Endemic	Found in Chaparral and Cismontane Woodlands at elevations of 1,003 - 5,018 feet.	N	M	There are 1.3-acres of Coast Live Oak Woodlands on the property and there is a CNDDB record from "eastern San Pasqual Valley" to the north (CDFW, 2015a). This CNDDB record has no exact location as the reference is vague from Reiser (2001).
Atriplex coulteri Coulter's Saltbush	List A/Rank 1B.2/S2/-/-	Found on alkaline or clay soils in Coastal Bluff Scrub, Coastal Dune, Coastal Scrub, and Valley and Foothill Grassland habitats at elevations of 9 - 1,514 feet.	N	U	There are no alkaline or clay soils mapped on the property (Bowman, 1973).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Atriplex pacifica South Coast Saltscale	List A/Rank 1B.2/S2/-/-	Found in Coastal Bluff Scrub, Coastal Dune, Coastal Scrub, and Playa habitats at elevations of 0 - 461 feet.	N	U	There is a small amount (0.8-acre) of disturbed Diegan Coastal Sage Scrub on the property. However, the highest known elevation for the species is \pm 639-feet lower than the lowest elevation on the property (1,100-feet).
Atriplex parishii Parish's Brittlescale	List A/Rank 1B.1/S1/-/-	Found on alkaline soils in Alkali Meadows, Vernal Pools, Chenopod Scrub, and Playa habitats at elevations of 82 - 6,251 feet.	N	U	There are no alkaline soils mapped on the property (Bowman, 1973).
Baccharis vanessae Encinitas Baccharis	List A/Rank 1B.1/S1/CE/FT CA Endemic	Found on soils derived from marine sandstones in Chaparral habitat at elevations of 197 - 2,369 feet.	N	U	There are no soils mapped on the site that are derived from marine sandstones (Bowman, 1973).
Bloomeria clevelandii San Diego Goldenstar	List A/Rank 1B.1/S2/-/-	Found in a variety of habitats on clay soils at elevations of 164 - 1,530 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973). NOTE: <i>Muilla clevelandii</i> is a synonym.
Brodiaea filifolia Thread-Leaved Brodiaea	List A/Rank 1B.1/S1/CE/FT CA Endemic	Found on clay soils in a variety of habitats at 82 - 3,685 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Brodiaea orcuttii Orcutt's Brodiaea	List A/Rank 1B.1/S2/-/-	Found on clay and sometimes serpentine soils in Vernal Pools and small drainages at elevations of 98 - 5,577 feet.	N	U	There are no clay or serpentine soils mapped on the property (Bowman, 1973).
Calandrinia breweri Brewer's Calandrinia	List D/Rank 4.2/S3S4/-/-	Found on sandy and loamy soils in disturbed or burned Chaparral and Coastal Scrub at elevations of 32 - 4,014 feet.	N	U	There is a small amount (0.8-acre) of disturbed Diegan Coastal Sage Scrub on the property. However, according to the CNPS (2015), there are no records of this species within the San Pasqual quad.
California macrophylla Round-Leaved Filaree	List B/Rank 1B.1/S3?/-/-	Found on clay soils in Cismontane Woodland and Valley and Foothill Grassland habitats at elevations of 49 - 3,948 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973). NOTE: <i>Erodium macrophyllum</i> is a synonym.
Calochortus dunnii Dunn's Mariposa Lily	List A/Rank1B.2/S2?/CR/-	Found on metavolcanic or gabbroic soils in Chaparral and Closed-Cone Coniferous Forest habitats at elevations of 608 - 6,021 feet.	N	U	There are no metavolcanic or gabbroic soils mapped on the property (Bowman, 1973).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Camissoniopsis lewisii Lewis' Evening-Primrose	List C/Rank 3/S4/-/-	Found in sandy or clay soils in a variety of habitats at elevations from 0 - 987 feet.	N	U	There are no clay soils, but there are sandy soils found on-site (Bowman, 1973). However, there are no records of this species within the San Pasqual quad (CNPS, 2015), and this species is found at elevations that are slightly lower than those found on-site. NOTE: <i>Camissonia lewisii</i> is a synonym. Another common name for this plant is Lewis's Sun Cup.
Ceanothus cyaneus Lakeside Ceanothus	List A/Rank 1B.2/S2/-/-	Found in Chaparral and Cismontane Woodlands at elevations ranging from 775 - 4,985 feet.	N	L	There are Chaparral elements on the property. However, there are no CNDDB records of this species within the San Pasqual quad (CDFW, 2015a).
Ceanothus verrucosus Wart-stemmed Ceanothus	List B/Rank 2B.2/S2/-/-	Associated with Chaparral habitats, it is frequently an indicator of Southern Maritime Chaparral. Known elevations range from 3 - 1,250 feet.	N	L	There are Chaparral elements on the property. However, there are no CNDDB records of this species within the San Pasqual quad (CDFW, 2015a).
Centromadia parryi ssp. australis Southern Tarplant	List A/Rank 1B.1/S2/-/-	Found in mesic areas, such as Marshes, Vernal Pools, and vernally mesic grasslands at elevations of 0 - 1,400 feet.	N	M	There is a small marsh in the western portion of the site that flows into the ephemeral drainage along the northwestern edge of the site. The closest CNDDB record is 1.2-miles to the southeast in the Ramona Grasslands (CDFW, 2015a).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Centromadia pungens ssp. laevis Smooth Tarplant	List A/Rank 1B.1/S2/-/- CA Endemic	Found on alkaline soils in mesic habitats, such as Meadows and Seeps, Playas, and Riparian Woodlands at elevations of 0 - 1,580 feet.	N	L	There are no alkaline soils mapped on the property (Bowman, 1973). However, there are riparian habitats on the site, but there are no CNDDB records within the San Pasqual quad (CDFW, 2015a).
Chamaebatia australis Southern Mountain Misery	List D/Rank 4.2/S4/-/-	Grows in gabbroic or metavolcanic soil in Chaparral at elevations from 987 - 2,303 feet.	N	U	There are no gabbroic or metavolcanic soils mapped on the property (Bowman, 1973).
Chorizanthe leptotheca Peninsular Spineflower	List D/Rank 4.2/S3/-/-	Found in xeric openings in Chamise Chaparral at elevations of 987 - 6,251 feet.	N	М	There are Chaparral elements on the property dispersed between the Avocado trees. This species is known from the San Pasqual quad (CNPS, 2015).
Chorizanthe polygonoides var. longispina Long-Spined Spineflower	List A/Rank 1B.2/S3/-/-	Found on clay soils in a variety of habitats at elevations of 98 - 5,034 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973).
Clarkia delicata Delicate Clarkia	List A/Rank 1B.2/S3/-/-	Found in Chaparral and Cismontane Woodlands at elevations ranging from 775 - 4,200 feet.	N	М	There are Chaparral elements on the property, and there are two CNDDB records for this species approximately 1¼-mile to the south, and ¼-mile to the northwest (CDFW, 2015a).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Clinopodium chandleri San Miguel Savory	List A/Rank 1B.2/S2/-/-	Found on gabbroic or metavolcanic soils in a variety of habitats at elevations of 394 - 3,537 feet.	N	U	There are no gabbroic or metavolcanic soils mapped on the property (Bowman, 1973). NOTE: <i>Satureja chandleri</i> is a synonym.
Comarostaphylis diversifolia ssp. diversifolia Summer Holly	List A/Rank 1B.2/S2/-/-	Found in coastal and inland Chaparral habitats, as well as Cismontane Woodlands at elevations of 98 - 1,809 feet.	N	L	There are Chaparral elements on the property. However, there are no CNDDB records of this species within the San Pasqual quad (CDFW, 2015a).
Convolvulus simulans Small-Flowered Morning-Glory	List D/Rank 4.2/S4/-/-	Grows on friable clay soils in a variety of habitats in areas devoid of shrubs. Found at elevations of 98 - 2,303 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973).
Dichondra occidentalis Western Dichondra	List D/Rank 4.2/S3S4/-/-	Found in Chaparral, Cismontane Woodland, Coastal Scrub, and Valley and Foothill Grassland habitats at elevations of 164 - 1,645 feet.	N	L	There are small amounts of Diegan Coastal Sage Scrub (0.8-acre) and Coast Live Oak Woodland (1.3-acres) on the property, and there are Chaparral elements in between the Avocado trees. This species is recorded within the San Pasqual quad (CNPS, 2015).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Dudleya variegata Variegated Dudleya	List A/Rank 1B.2/S2/-/-	Found on rocky or clay soils in Chaparral, Cismontane Woodland, Coastal Scrub and Valley and Foothill Grassland habitats at elevations of 9 - 1,909 feet.	N	L	There are small amounts of Diegan Coastal Sage Scrub (0.8-acre) and Coast Live Oak Woodland (1.3-acres) on the property, and there are rocky soils mapped on the property (Bowman, 1973). However, there are no CNDDB records of this species within the San Pasqual quad (CDFW, 2015a).
Ericameria palmeri ssp. palmeri Palmer's Goldenbush	List B/Rank 1B.1/S1/-/-	Associated with granitic soils in Chaparral and Sage Scrub habitats. Seasonally wet/moist locales are strongly preferred. Grows at elevations of 98 - 1,974 feet.	N	L	There are Chaparral elements on the property. However, they are not underlain by mesic soils.
Eryngium aristulatum var. parishii San Diego Button-Celery	List A/Rank 1B.1/S1/CE/FE	Typically found in Vernal Pools, but this species is also tolerant of some of the habitats adjacent to Vernal Pools, such as Coastal Scrub and Valley and Foothill Grassland habitats. Grows at elevations of 65 - 2,040 feet.	N	U	There are no Vernal Pools on or in the immediate vicinity of the property.

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Ferocactus viridescens San Diego Barrel Cactus	List B/Rank 2B.1/S3/-/-	Found in a variety of habitats, such as Sage Scrub, Chaparral, and Valley and Foothill Grassland. Often found on south-facing slopes at elevations ranging from 9 - 1,481 feet.	N	L	There are Chaparral elements on the property, as well as, marginal Sage Scrub habitat. However, there are no CNDDB records of this species within the San Pasqual quad (CDFW, 2015a).
Geothallus tuberosus Campbell's Liverwort	- /Rank 1B.1/S1/-/- CA Endemic	Found in Coastal Scrub and Vernal Pool habitats on mesic soils at elevations of 32 - 1,974 feet.	N	L	There are no Vernal Pool habitats on the property. Also, although there are marginal Sage Scrub habitats on the property, there are no CNDDB records of this species within the San Pasqual quad (CDFW, 2015a).
Gilia caruifolia Caraway-leaf Gilia	List D/List 4.3/S4/-/-	Found in Chaparral and Lower Mountain Coniferous Forest habitats at elevations of 2,763 - 7,567 feet.	N	U	The lowest known elevation for this species is approximately 3,066-feet higher than the highest elevation on the property. NOTE: <i>Saltugilia caruifolia</i> is a synonym.
Githopsis diffusa ssp. filicaulis Mission Canyon Bluecup	List C/Rank 3.1/S1/-/- CA Endemic	Found on mesic soils or in disturbed areas within Chaparral habitats at elevations of 1,480 - 2,300 feet.	N	L	There are Chaparral elements on the property. However, there are no CNDDB records of this species within the San Pasqual quad (CDFW, 2015a).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Grindelia hallii San Diego Gumplant	List A/Rank 1B.2/S2/-/- CA Endemic	Found in Chaparral, Lower Montane Coniferous Forest, Meadows and Seeps, and Valley and Foothill Grassland habitats, frequently in low moist areas within meadows, at elevations of 608 - 5,742 feet.	N	U	There are Chaparral elements on-site, but there are no Montane Meadows or Lower Montane Coniferous Forests on the property. Also, the closest CNDDB record is 7.7-miles to the southwest in Poway (CDFW, 2015a). NOTE: <i>Grindelia hirsutula</i> var. <i>hallii</i> is a synonym.
Harpagonella palmeri Palmer's Grapplinghook	List D/Rank 4.2/S3/-/-	Found in clay soils within Chaparral, Coastal Scrub, and Valley and Foothill Grassland habitats at elevations of 65 - 3,142 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973).
Holocarpha virgata ssp. elongata Graceful Tarplant	List D/Rank 4.2/S3/-/- CA Endemic	Found in annual and perennial grasslands at elevations of 197 - 3,619 feet.	N	U	There are no grassland habitats on the property.
Hordeum intercedens Bobtail Barley	List C/Rank 3.2/S3S4/-/-	Occurs on alkaline flats, dry, saline streambeds, and Vernal Pool basins at elevations of 16 - 3,290 feet.	N	U	There are no alkaline flats, saline streambeds, or Vernal Pools on the property. NOTE: Another common name for this plant is Vernal Barley.

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Horkelia truncata Ramona Horkelia	List A/Rank 1B.3/S3/-/-	Found in Chaparral and Cismontane Woodlands at elevations of 1,300 - 4,270 feet.	N	М	There are Chaparral elements on the property and there is one CNDDB record within the San Pasqual quad approximately 3½-miles to the southwest on Woodson Mountain (CDFW, 2015a).
Isocoma menziesii var. decumbens Decumbent Goldenbush	List A/Rank 1B.2/S2/-/-	Associated with Sage Scrub habitats at elevations of 30 - 440 feet.	N	U	This plant is found at elevations lower than those represented on-site. Also, there are no CNDDB records for the plant within the San Pasqual quad (CDFW, 2015a). NOTE: The Flora of North America (Vol. 20) has eliminated all varieties and just refers to the plant as Isocoma menziesii. Rebman and Simpson (2006) identifies the plant as Isocoma menziesii var. menziesii and commonly calls it Spreading Goldenbush.
Iva hayesiana San Diego Marsh-Elder	List B/Rank 2B.2/S2/-/-	A species found in marshy habitats in slow moving waters at elevations of 32 - 1,645 feet.	N	L	There is a small freshwater marsh in the northwest portion of the site. However, there are no CNDDB records for the plant within the San Pasqual quad (CDFW, 2015a).
Juncus acutus ssp. leopoldii Southwestern Spiny Rush	List D/Rank 4.2/S4/-/-	Found in mesic Coastal Dunes, Meadows and Seeps, and coastal Marshes and Swamps at elevations that range from 9 - 2,961 feet.	N	U	There is a small freshwater marsh in the northwest portion of the site, but the site itself is located in Ramona, not along the coast. Also, there are no Meadows or Seeps on-site.

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Lepechinia cardiophylla Heart-leaved Pitcher Sage	List A/Rank 1B.2/S2S3/-/-	In San Diego County, this species is found in Chaparral habitat on Iron Mountain at an elevation of 2,000 feet.	N	U	The site is not located on Iron Mountain.
Lepechinia ganderi Gander's Pitcher Sage	List A/Rank 1B.3/S3/-/-	Found in a variety of habitats on metavolcanic or gabbroic soils at elevations ranging from 1,003 - 3,307 feet.	N	U	There are no gabbroic or metavolcanic soils mapped on the property (Bowman, 1973).
Lepidium virginicum ssp. robinsonii Poor Man's Pepper	List A/Rank 4.3/S3/-/-	Found in Coastal Scrub and Chaparral habitats in relatively dry, exposed locales at elevations of 3 - 2,912 feet.	N	L	There are Chaparral elements on the property, as well as, marginal Sage Scrub habitats. However, the closest CNDDB record is 2.6-miles to the southwest in Blue Sky Ecological Reserve (CDFW, 2015a). NOTE: Lepidium virginicum var. menziesii is a synonym.
Leptosiphon grandifloras Large-flowered Leptosiphon	-/Rank 4.2/S3/-/- CA Endemic	Found in sandy soils in a variety of habitats at elevations of 16 – 4014 feet.	N	M	Some of the soils mapped on-site are sandy loams (Bowman, 1973), there is a small amount of Diegan Coastal Sage Scrub on-site, and the elevations on the property are within the known elevational range of the species. According to the CNPS, this species is recorded from the San Pasqual quad (CNPS, 2015).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Mentzelia tridentata Creamy Blazing Star	-/Rank 1B.3/S3/-/- CA Endemic	Found in Mojave Desert Scrub at elevations of 2,303 - 3,816 feet.	N	U	The site does not contain Mojave Desert Scrub. Also, according to Rebman and Simpson (2006), this species is not found in San Diego County.
Mimulus clevelandii Cleveland's Bush Monkeyflower	List D/Rank 4.2/S4/-/-	Found in Chaparral, Cismontane Woodland, and Lower Montane Coniferous Forest habitats at elevations of 1,480 - 6,580 feet.	N	U	There are Chaparral elements in between the Avocado trees on-site, but the highest elevation on-site is just barely within the known elevational range of the species. Also, there are no CNDDB records within 10-miles of the site (CDFW, 2015a), nor are there any CNPS records of this species within the San Pasqual quad (CNPS, 2015).
Mimulus diffusus Palomar Monkey Flower	List D/Rank 4.3/S3/-/-	Found in Chaparral or Lower Montane Coniferous Forests on sandy or gravelly soils at elevations of 4,013 - 6,021 feet.	N	U	There are Chaparral elements in between the Avocado trees on-site, but this species is found at much higher elevations than those found on the property. NOTE: <i>Mimulus palmeri</i> is a synonym.
Monardella hypoleuca ssp. lanata Felt-Leaved Monardella	List A/Rank 1B.2/S3/-/-	Found in Chaparral and Cismontane Woodland habitats on sandy soils at elevations of 987 – 5,182 feet.	N	M	There are Chaparral elements on the property and there are two CNDDB records within the San Pasqual quad approximately 3½-miles to the south near Woodson Mountain (CDFW, 2015a).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Monardella viminea Willowy Monardella	List A/Rank1B.1/S1/CE/FE CA Endemic	A species found in canyons and washes within riparian, Sage Scrub, and Chaparral habitats at elevations of 164 - 741 feet.	N	U	The highest known elevation for this species is approximately 359-feet lower than the lowest elevation on the property. Also, there are no CNDDB records for this species within the San Pasqual quad (CDFW, 2015a).
Myosurus minimus ssp. apus. Little Mousetail	List C/Rank 3.1/S2/-/-	Found in Vernal Pools and occasionally in Valley and Foothill Grasslands adjacent to Vernal Pools at elevations of 65 - 2,106 feet.	N	U	There are no Vernal Pools or Valley and Foothill Grasslands on the property.
Nama stenocarpa Mud Nama	List B/Rank 2B.2/S1S2/-/-	This species is found on the muddy embankments of ponds, lakes, and occasionally rivers. Grows at elevations of 16 - 1,645 feet.	N	L	There is a small marsh (0.1-acre) with muddy edges near the west/central edge of the property. However, there are no CNDDB records of this species in the San Pasqual quad (CDFW, 2015a).
Navarretia fossalis Spreading Navarretia	List A/Rank 1B.1/S2/-/FT	In San Diego County, the preferred habitat of this species is Vernal Pools. Found at elevations of 98 - 2,155 feet.	N	U	There are no Vernal Pools on the property.

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Navarretia peninsularis Baja Navarretia	List A/Rank 1B.2/S2/-/-	Found in Lower Montane Coniferous Forest and Chaparral habitats at elevations of 4,935 - 7,979 feet.	N	U	Although there are Chaparral elements on the property, this species is found at elevations much higher than those represented on-site.
Nolina cismontana Chaparral Nolina	List A/Rank 1B.2/S3/-/- CA Endemic	Found in Chaparral and Coastal Scrub habitats on gabbroic or sandstone soils at elevations of 460 - 4,195 feet.	N	U	There are no gabbroic or sandstone soils mapped on the property (Bowman, 1973). NOTE: Another common name for this plant is Chaparral Beargrass.
Ophioglossum californicum California Adder's-Tongue	List D/Rank 4.2/S4/-/-	Found on the periphery of Vernal Pools and seeps and other vernally moist locales at elevations of 197 - 1,728 feet.	N	М	There are no Vernal Pools on the property, but there is a small marsh on-site (0.1-acre). This species is recorded from the San Pasqual quad (CNPS, 2015).
Packera ganderi Gander's Ragwort	List A/Rank 1B.2/S2/CR/- CA Endemic	A species found in Chaparral habitat on gabbroic soils at elevations of 1,316 - 3,948 feet.	N	U	There are no gabbroic soils mapped on the property (Bowman, 1973). NOTE: Senecio ganderi is a synonym.

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Pentachaeta aurea ssp. aurea Golden-rayed Pentachaeta	List D/Rank 4.2/S3/-/-	Found in Cismontane Woodland, Coastal Scrub, Lower Montane Coniferous Forest, and Valley and Foothill Grassland habitats at elevations of 263 - 6,087 feet.	N	L	Although there are Chaparral elements, and minimal Coast Live Oak Woodlands and Diegan Coastal Sage Scrub on the property, this species is not known from the San Pasqual quad (CNPS, 2015). NOTE: The County List D only refers to the specific epithet, not to any subspecies.
Piperia leptopetala Narrow-Petal Rein Orchid	List D/List 4.3/S4/-/- CA Endemic	Found in Cismontane Woodland, Lower Montane Coniferous Forest, and Upper Montane Coniferous Forest at elevations of 1,250 - 7,321 feet.	N	U	There are limited Coast Live Oak Woodland habitats on the property and there are no CNDDB records of this species within 10-miles of the property (CDFW, 2015a), nor any CNPS records within the San Pasqual quad (CNPS, 2015).
Pogogyne abramsii San Diego Mesa Mint	List A/Rank1B.1/S1/CE/FE CA Endemic	A Vernal Pool obligate. Found at elevations of 296 - 658 feet.	N	U	There are no Vernal Pools on the property.
Polygala cornuta var. fishiae Fish's Milkwort	List D/Rank 4.3/S4/-/-	Found in Chaparral, Riparian Woodland, or Cismontane Woodland with Coast Live Oaks at elevations of 329 - 3,290 feet.	N	М	There are Chaparral elements on the property, as well as, Coast Live Oaks. This variety is documented from the San Pasqual quad (CNPS, 2015).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Quercus cedrosensis Cedros Island Oak	List B/Rank 2B.2/S1/-/-	Found in Closed-cone Coniferous Forest, Chaparral, and Coastal Scrub at elevations of 838 - 3,159 feet.	N	U	Although there are Chaparral elements on-site, and minimal Diegan Coastal Sage Scrub, this species is known in California from fewer than ten occurrences near Otay Mountain (CNPS, 2015).
Quercus dumosa Nuttall's Scrub Oak	List A/Rank 1B.1/S3/-/-	A coastal form of the Scrub Oak found in Chaparral, Closed-cone Coniferous Forest, and Coastal Scrub habitats at elevations of 49 - 1,316 feet.	N	L	There are Chaparral elements on the property. However, there are no CNDDB records of this species within the San Pasqual quad (CDFW, 2015a).
Quercus engelmannii Engelmann Oak	List D/Rank 4.2/S3/-/-	Found in Chaparral, Cismontane Woodland, Riparian Woodland and Valley and Foothill Grassland habitats at elevations of 164 - 4,277 feet.	N	М	There are Chaparral elements on the property, as well as, minimal Coast Live Oak Woodland habitat. This species is documented within the San Pasqual quad (CNPS, 2015).
Ribes canthariforme Moreno Currant	List A/Rank 1B.3/S2/-/- CA Endemic	Found in Chaparral and Riparian Scrub habitats at elevations of 1,118 - 3,948 feet.	N	L	There are Chaparral elements on the property. However, there are no CNDDB records of this species within the San Pasqual quad (CDFW, 2015a).

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Scutellaria bolanderi ssp. austromontana Southern Mountains Skullcap	List A/Rank 1B.2/S3/-/- CA Endemic	Found in gravelly soils on stream banks or in mesic sites within Oak or Pine Woodland within Chaparral, Cismontane Woodland, and Lower Montane Coniferous Forest habitats at elevations of 1,398 - 6,580 feet.	N	U	There are Chaparral elements on-site and minimal Coast Live Oak Woodland. However, this species tends to be found at elevations higher than those found on-site. Also, there are no CNDDB records of this species within the San Pasqual quad (CDFW, 2015a).
Selaginella cinerascens Ashy Spike-Moss	List D/Rank 4.1/S3/-/-	Found in undisturbed Chaparral and Diegan Sage Scrub. Rarely inhabits disturbed soils. Grows at elevations of 66 - 2,106 feet.	N	Н	Large patches of this moss were noted off-site to the east around the large boulder patches.
Senecio aphanactis Chaparral Ragwort	List B/Rank 2B.2/S2/-/-	Found on alkaline soils in Chaparral, Coastal Scrub and Cismontane Woodland habitats. Grows at elevations of 49 - 2,632 feet.	N	U	There are no alkaline soils mapped on the property (Bowman, 1973). NOTE: Another common name for this species is Rayless Ragwort.
Stemodia durantifolia Purple Stemodia	List B/Rank 2B.1/S2/-/-	A species of mesic, sandy areas in Sonoran Desert Scrub. Grows at elevations of 592 - 987 feet.	N	U	There is no Sonoran Desert Scrub habitat on the property.

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Stipa diegoensis San Diego County Needle Grass	List D/Rank 4.2/S4/-/-	Found in Chaparral and Coastal Scrub habitats on rocky soils at elevations of 32 – 2,632 feet.	N	L	There are Chaparral elements and minimal Diegan Coastal Sage Scrub habitat on the property. However, there are no records of this species within the San Pasqual quad (CNPS, 2015). NOTE: <i>Achnatherum diegoensis</i> is a synonym.
Tetracoccus dioicus Parry's Tetracoccus	List A/Rank 1B.2/S2/-/-	Found in Chaparral and Sage Scrub habitats on stony, decomposed gabbroic soil at elevations ranging from 493 – 3,290 feet.	N	U	There are no gabbroic soils mapped on the property (Bowman, 1973).
Thermopsis californica var. semota Velvety False Lupine	List A/Rank 1B.2/S2/-/- CA Endemic	Found in Lower Montane Coniferous Forest, Cismontane Woodland, Valley and Foothill Grassland, Meadow and Seep, and other wetland habitats at elevations of 3,290 - 6,153 feet.	N	U	Although there are riparian and Coast Live Oak Woodland habitats, the lowest known elevation for the species is approximately 1,750-feet higher than the highest elevation onsite.
Triquetrella californica Coastal Triquetrella	-/Rank 1B.2/S2/-/-	Grows within 100 feet of the coast in Coastal Bluff Scrub and Coastal Scrub habitats at elevations of 32 – 329 feet.	N	U	This Ramona property is not located within 100-feet of the coast.

Scientific Name Common Name ²	Sensitivity Code and Status ³	Habitat Preference	Found On-site (Y or N)	Potential On-site ⁴	Factual Basis for Potential
Viguiera laciniata San Diego County Viguiera	List D/Rank 4.2/S4/-/-	Found in Chaparral and Coastal Scrub habitats at elevations of 197-2,468 feet.	N	M	There are Chaparral elements on-site and there is minimal Diegan Coastal Sage Scrub habitat on the property. This species is documented within the San Pasqual quad (CNPS, 2015).
Xanthisma junceum Rush-like Bristleweed	List D/Rank 4.3/S4/-/-	Found in Chaparral and Coastal Scrub habitats at elevations of 789 – 3,290 feet.	N	M	There are Chaparral elements on-site and there is minimal Diegan Coastal Sage Scrub habitat on the property. This species is documented within the San Pasqual quad (CNPS, 2015). NOTE: Synonyms are <i>Haplopappus junceus</i> , and <i>Machaeranthera juncea</i> .

Key to the California Rare Plant Ranking System

Rare Plant Rank 1A — Extirpated in California, Rare or Extinct Elsewhere

Rare Plant Rank 1B — Rare, Endangered

Rare Plant Rank 2A — Extirpated in California, Common Elsewhere

Rare Plant Rank 2B — Endangered in California

Rare Plant Rank 3 — Needs Review

Rare Plant Rank 4 — Uncommon in California

Key to the California Rare Plant Rank Threat Code Extensions

- .1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- .2 Fairly threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
- .3 Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Key to the State Ranking of the CNDDB

- S1 Critically Imperiled Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state/province
- S2 Imperiled Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province
- S3 Vulnerable Vulnerable in the state due to restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation
- S4 Apparently Secure Uncommon but not rare; some cause for long-term concern due to declines or other factors
- S5 Secure Common, widespread, and abundant in the state
- ? By adding a question mark, it represents uncertainty. For example, a S2? means more certainty than S2S3, but less certainty than S2

Two S Ranks — Two S Ranks represent a range of values. For example, a S2S3 means the rank is somewhere between S2 and S3.

SXC — All sites in California are extirpated, but the species exists in cultivation

SH — All California sites are historical

¹ This plant list was generated by the nine quad search function of the on-line California Native Plant Society (CNPS) inventory that was updated through August 5, 2015. This list was augmented with plants from the San Diego County Sensitive Plant Lists A, B, C, and D and a nine quad search of the California Natural Diversity Data Base (CNDDB).

² The Common Names were taken from Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., and Wilken, D.H. eds. 2012. The Jepson Manual Vascular Plants of California, 2nd Edition. University of California Press, Berkeley, xxii + 1568 pp.

³ The first line in the "Sensitivity Code and Status" column shows the California Rare Plant Rank with threat code extensions/the state ranking of the California Natural Diversity Database (CNDDB) with the threat rank extension/the California state threatened and endangered status code/the federal threatened and endangered status code. The second line in the "Sensitivity Code and Status" column identifies whether the species is a California Endemic as identified by the CNPS or not (blank second line). Following is a key to the codes in the table.

Key to the Threat Rank Extensions of S1, S2 or S3 (if assigned)

- .1 very threatened
- .2 threatened
- .3 that no current threats are known

State and Federal Threatened and Endangered Species Status Codes

- CR State of California listed as rare
- CE State of California listed as endangered
- CT State of California listed as threatened
- PT Proposed for Listing as Threatened under the Federal Endangered Species Act
- PE Proposed for Listing as Endangered under the Federal Endangered Species Act
- FC Candidate for Listing under the Federal Endangered Species Act
- FE Designated Endangered under Federal Endangered Species Act
- FT Designated as Threatened under the Federal Endangered Species Act

Observed — Individuals of this species were found within the bounds of the site

- H The potential for occurrence is "high". Habitats on-site are considered suitable for the species, and the species is known from the immediate vicinity.
- M The potential for occurrence is "medium". Habitats and conditions on-site are considered possible for the species.
- L The potential for occurrence is "low". The habitats present on-site are marginal for the species and/or extremely limited in extent. In other words, the species is not anticipated, but it's occurrence can not be precluded.
- U The potential for occurrence is "unlikely". The habitat requirements of the species are not present on the subject property.

⁴ The "Potential On-site" column assesses the potential for the particular species to occur on the subject property given the known habitat preferences and distribution of that species. The codes used in this column are defined as follows:

Table 4

Sensitive Wildlife Species Known to Occur Within an Approximate 10-mile Radius¹ of the Gildred TPM 21176 — Ramona

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
		Insects			
Danaus plexippus Monarch Butterfly	Group 2, —/—/—	This species is found in a variety of open habitats typically where the larval host plants, the true Milkweeds (Asclepias spp.), are found.	N	U	There were no Milkweeds found during any of the site visits.
Lycaena hermes Hermes Copper Butterfly	Group 1,—/—/—	Associated closely with the larval food plant, Redberry (<i>Rhamnus crocea</i>). Recent studies indicate that the butterfly prefers those Redberry that are roughly 18-years and older.	N	U	There were no Redberry plants found on the property.
		Crustaceans			
Branchinecta sandiegonenis San Diego Fairy Shrimp	Group 1, FE/—/—	A Vernal Pool obligate.	N	U	There are no Vernal Pools on the property.
Streptocephalus woottoni Riverside Fairy Shrimp	Group 1, FE/—/—	A Vernal Pool obligate.	N	Ŭ	There are no Vernal Pools on the property.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
		Fish			
Gila orcutti Arroyo Chub	Group 1, —/CSC/ FS Sensitive	Found in slow-moving sections of permanent streams in water depths of generally > 40 cm deep. Stream bottom substrates are typically muddy or sandy.	N	U	The drainage on-site is ephemeral.
		Amphibians			
Bufo californicus Arroyo Southwestern Toad	Group 1, FE/CSC/—	Found primarily in the foothills and mountains along stream courses that afford open, sunny sandbars.	N	U	The drainage on-site is ephemeral and does not contain suitable breeding habitat. This drainage is a tributary to Santa Maria Creek 3,200-feet north from the northern property boundary. This segment of Santa Maria Creek is the closest known occupied habitat (FWS, 2005). Holland and Sisk (2000) demonstrated that almost all toads are found within riparian habitat, and that the small percentage not found there are generally found within 1,640-feet of the riparian habitat. Therefore, the property is not anticipated to contain aestivating toads either. NOTE: Bufo miocroscaphus californicus and Anaxyrus californicus are synonyms.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Ensatina klauberi Large-blotched Salamander	Group 1, —/CSC/FS Sensitive	Found in Pine and Oak Woodlands in the San Diego mountain ranges under logs, bark, and rocks.	N	U	This species is found at much higher elevations in the Palomar, Laguna and Cuyamaca Mountain Ranges. NOTE: <i>Ensatina eschscholtzii klauberi</i> is a synonym.
Rana aurora draytoni California Red-legged Frog	Group 1, FT/CSC/—	The California Red-legged Frog usually prefers dense riparian habitats associated with deep, still, or non-moving water. It also occurs in damp areas away from water.	N	U	The drainage on-site is ephemeral and does not contain suitable breeding habitat. NOTE: <i>Rana draytonii</i> is a synonym.
Spea hammondii Western Spadefoot Toad	Group 2, —/CSC/BLM Sensitive	A cryptic species, this toad probably occurs throughout the coastal plain and foothills, anywhere ephemeral water sources develop.	N	U	The drainage on-site is expected to carry surface water only shortly after rain events, not long enough to provide suitable breeding habitat. NOTE: <i>Spea scaphiopus hammondii</i> is a synonym.
		Reptiles			
Actinemys marmorata pallida Southwestern Pond Turtle	Group 1,—CSC/FS and BLM Sensitive	Most often found in environments where water persists year-round. It has also been found at two drainages in the desert. It prefers lakes, streams, ponds or other areas with emergent or floating vegetation and often basks on rocks or protruding logs.	N	U	The drainage on-site is ephemeral and does not contain suitable breeding habitat. NOTE: <i>Clemmys marmorata pallida</i> is a synonym.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Anniella pulchra pulchra Silvery Legless Lizard	Group 2, —/CSC/FS Sensitive	Occurs throughout the County (except for the low desert) where it is fossorial in soft soils and deep leaf litters. Some soil moisture is preferred.	N	М	The leaf litter under the Avocado trees may provide suitable habitat for the species.
Aspidoscelis hyperythra Orange-throated Whiptail	Group 2, —/CSC/—	Occupies scrub habitats on the coastal plain and lower foothills where Subterranean Termites (<i>Reticulitermes</i> sp.), the principal prey species, is found. Shrub cover with openings are required for thermoregulation.	Y	Observed	Two individual Orange-throated Whiptails were observed in the northwestern portion of the property. NOTE: Aspidoscelis hyperythrus beldingi and Cnemidophorus hyperythrus are synonyms and another common name for the species is Belding's Orange-throated Whiptail.
Aspidoscelis tigris stejnegeri Coastal Western Whiptail	Group 2, —/—/—	Occupies scrub habitats on the coastal plain and lower foothills where shrub cover with openings is required for thermoregulation.	Y	Observed	Three Coastal Western Whiptail were observed in the northwestern portion of the property. NOTE: Cnemidophorus tigris multiscutatus is a synonym.
Charina trivirgata roseofusca Coastal Rosy Boa	Group 2, —/—/FS and BLM Sensitive	A cryptic species found in a variety of habitats, including sage scrubs, Chaparrals and Pinyon-Juniper Woodlands.	N	М	There are Chaparral elements onsite, and there is one CNDDB record of the species within the San Pasqual quad (Fish and Wildlife, 2015a). NOTE: Charina trivirgata is a synonym.
Coleonyx variegatus abbottii San Diego Banded Gecko	Group 1, —/—/—	The Gecko prefers rocky Sage Scrub and Chaparral habitats on the coastal side of the mountains.	N	М	There are Chaparral elements, as well as, marginal Sage Scrub elements on-site, and the terrain is quite rocky.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Crotalus ruber ruber Northern Red Diamond Rattlesnake	Group 2, —/CSC/—	In a variety of habitats, although most frequently found in Sage Scrub and Chaparral. It is found throughout the County except for the low desert.	N	М	There are Chaparral elements, as well as, marginal Sage Scrub habitats on-site, and there are two CNDDB records of the species within the San Pasqual quad (Fish and Wildlife, 2015a).
Diadophis punctatus similis San Diego Ringneck Snake	Group 2, —/—/FS Sensitive	In San Diego, this snake is found in a variety of habitats from the coast to the mountains. It is typically found under rotting logs, bark, rocks and damp leaves.	N	L	There are Chaparral elements onsite. However, there are no CNDDB records of this species within the San Pasqual quad (Fish and Wildlife, 2015a).
Eumeces skiltonianus interparietalis Coronado Skink	Group 2, —/CSC/BLM Sensitive	In a variety of habitats ranging from coastal scrub, to Chaparral and forested slopes, into the denser desert scrub and Pinyon-Juniper Woodlands.	N	L	There are Chaparral elements onsite. However, there are no CNDDB records of this species within the San Pasqual quad (Fish and Wildlife, 2015a). NOTE: Plestiodon skiltonianus interparietalis is a synonym and another common name for this reptile is Coronado Island skink.
Phrynosoma coronatum San Diego Horned Lizard	Group 2, —/CSC/FS Sensitive	Found throughout the County (except the low deserts) anywhere the primary prey species, harvester ants (<i>Pogonomyrmex</i> sp. and <i>Messor</i> sp.) are found. It requires some openings in vegetation for thermoregulation.	N	M	Harvester ants were noted on the property, and there are CNDDB records of this species within the San Pasqual quad (Fish and Wildlife, 2015a). NOTE: Phrynosoma coronatum blainvillii and Phrynosoma blainvillii are synonyms. Another common name for this lizard is Coast Horned Lizard.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Salvadora hexalepis virgultea Coast Patch-nosed Snake	Group 2, —/CSC/—	Found in arid Sage Scrub and Chaparral habitats.	N	М	There are Chaparral elements on- site, and there is one CNDDB record of the species within the San Pasqual quad (Fish and Wildlife, 2015a).
Thamnophis hammondii Two-striped Garter Snake	Group 1, —/CSC/FS and BLM Sensitive	An aquatic snake found in association with fluvial and lacustrine environments, even cattle tanks. Aestivating individuals may be found some distance from water sources.	N	U	The drainage on-site is expected to carry water only shortly after rain events, not long enough to provide suitable habitat for this aquatic snake.
Thamnophis sirtalis ssp. infernalis South Coast Garter Snake	Group 2, —/CSC/—	In southern California, this snake is found in marsh habitats, and upland habitats near permanent water.	N	L	There is a small area near the west/central edge of the property that contains marsh vegetation, but the hydrology in this area is ephemeral. Also, there are no CNDDB records of this subspecies within the San Pasqual quad (Fish and Wildlife, 2015a). NOTE: <i>Thamnophis sirtalis novum</i> , is a synonym.
		Mammals			
Antrozous pallidus Pallid Bat	Group 2, —/CSC/FS and BLM Sensitive; WBWG High Priority	A bat that feeds on the ground (Jerusalem Crickets and scorpions are typical fare). This species will roost in any cavity (natural or man-made) that affords a considerable modicum of darkness.	N	М	The boulders on the property provide suitable roosting habitat, and there is one CNDDB record of the species within the San Pasqual quad (Fish and Wildlife, 2015a).

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Bassariscus astutus Ringtail	Group 2, —/—/—	Found in brushy, wooded areas, generally at lower and middle elevations. The Ringtail is especially common in foothill canyons. Less common in the high mountains, but is known to live up to 2,600 m.	N	ט	The property seems too disturbed by the Avocado orchard to expect this species.
Chaetodipus californicus femoralis Dulzura California Pocket Mouse	Group 2, —/CSC/—	Frequent in arid Chaparral habitats in the foothills and lower mountain slopes of the County.	N	L	There are Chaparral elements on- site. However, there are no CNDDB records of this species within the San Pasqual quad (Fish and Wildlife, 2015a).
Chaetodipus fallax fallax Northwestern San Diego Pocket Mouse	Group 2, —/CSC/—	Found in coastal sage scrub, sage scrub/grassland ecotones and chaparral communities. Found in open, sandy areas.	N	L	There are Chaparral elements, as well as, marginal Sage Scrub habitats on-site. However, there are no CNDDB records of this species within the San Pasqual quad (Fish and Wildlife, 2015a).
Choeronycteris mexicana Mexican Long-tongued Bat	Group 2, —/CSC/WBWG High Priority	This bat feeds on the nectar of night-blooming succulents. Occurs occasionally in extreme southern California at the northern edge of its range. Roosts in caves and buildings.	N	ט	There are no suitable roosting sites for this species on the property.
Corynorhinus townsendii Townsend's Big-eared Bat	Group 2, —/CSC/BLM Sensitive; FS Sensitive; WBWG High Priority	Associated with Desert Scrub and Pinyon and Juniper Woodlands. It roosts in caves or man-made structures.	N	U	There are no suitable roosting sites for this species on the property.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Dipodomys stephensi Stephen's Kangaroo Rat	Group 1, FE/CT/—	Prefers open Scrub and grassland habitats.	N	U	The combination of shallow soils, large boulder slabs, and dense cover within the Avocado orchard precludes this species.
Euderma maculatum Spotted Bat	Group 2, —/CSC/BLM Sensitive; WBWG High Priority	Found in both montane open coniferous forests and low deserts. This species dwells primarily in caves.	N	U	There are no suitable roosting sites for this species on the property.
Eumops perotis californicus Greater Western Mastiff Bat	Group 2, —/CSC/BLM Sensitive; WBWG High Priority	Frequently associated with cliffs or abandoned buildings that afford a considerable vertical drop from the roost to become airborne.	N	U	There are no suitable roosting sites for this species on the property.
Felis concolor Mountain Lion	Group 2, —/—/—	The Mountain Lion prefers habitats with sufficient vegetative cover and ample prey including, deer, rabbits, squirrels, skunks, and other mammals.	N	L	The site seems to provide sufficient vegetative cover. However, the human activity associated with the Avocado orchard operation may preclude the species.
Lasionycteris noctivagans Silver-haired Bat	—, —/—/WBWG Medium Priority	During the winter, this species is found in forested areas as this is mainly a tree-dwelling bat.	N	L	The Avocado trees and scattered Coast Live Oaks may provide suitable roosting habitat for the species. However, there are no CNDDB records of this species within the San Pasqual quad (Fish and Wildlife, 2015a).

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Lasiurus blossevillii Western Red Bat	Group 2, —/CSC/FS Sensitive; WBWG High Priority	It is found in and near deciduous trees, frequently in orchards.	N	М	The property is occupied by an active Avocado orchard, and there are two CNDDB records of this species within the San Pasqual quad (Fish and Wildlife, 2015a).
Lasiurus cinereus Hoary Bat	—, —/—/WBWG Medium Priority	Seasonally found in forested areas.	N	L	The Avocado trees and scattered Coast Live Oaks may provide suitable roosting habitat for the species, and there are two CNDDB records of this species within the San Pasqual quad (Fish and Wildlife, 2015a).
Lasiurus xanthinus Western Yellow Bat	—, —/CSC/WBWG High Priority	Expected in the desert region of San Diego County. Roosts in trees.	N	L	The Avocado trees and scattered Coast Live Oaks may provide suitable roosting habitat for the species. However, there are no CNDDB records of this species within the San Pasqual quad (Fish and Wildlife, 2015a).
Lepus californicus bennettii San Diego Black-tailed Jackrabbit	Group 2, —/CSC/—	Found in a variety of habitats throughout the County, but requires open or semi-open vegetation.	N	U	There is too much vegetative cover to expect this species.
Myotis ciliolabrum Small-footed Myotis	Group2, —/—/BLM Sensitive; WBWG Medium Priority	Roosts alone or in small groups in rock crevices, mines, caves, or buildings.	N	L	The boulders on the property provide suitable roosting habitat, and there is one CNDDB record of the species within the San Pasqual quad (Fish and Wildlife, 2015a).

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Myotis evotis Long-eared Myotis	Group 2,—/—/BLM Sensitive; WBWG Medium Priority	Found in montane forests.	N	U	There are no montane forests on the property.
Myotis thysanodes Fringed Myotis	Group 2, —/—/BLM Sensitive; WBWG High Priority	Found in coastal and montane forests and about mountain meadows.	N	U	There are no montane forests or mountain meadows on the property.
Myotis volans Long-legged Myotis	Group 2, —/—/ WBWG High Priority	Found in forested and brushy areas up to 2,500 m. in deserts and 3,300 m. in the mountains.	N	L	The Avocado trees and scattered Coast Live Oaks may provide suitable roosting habitat for the species.
Myotis yumanensis Yuma Myotis	Group 2, —/—/BLM Sensitive; WBWG Low to Medium Priority	This species roosts in caves and man-made structures, and is closely associated with water sources.	N	U	There are no suitable roosting sites for this species on the property.
Neotoma lepida intermedia San Diego Desert Woodrat	Group 2, —/CSC/—	An inhabitant of Sage Scrubs and Chaparral, especially with yuccas and cactus. Typical nests are embedded in rock crevices and partially underground.	N	М	There are abundant rock crevices within the property in which this species could build a nest. However, there are no CNDDB records of this small mammal within the San Pasqual quad (Fish and Wildlife, 2015a).
Nyctinomops femorosaccus Pocketed Free-tailed Bat	Group 2, —/CSC/—;WBWG Medium Priority	Roosting in a variety of situations, this species is associated with desert shrub and pine-oak woodlands.	N	U	There are no desert shrub or pine- oak woodland habitats on the property.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Nyctinomops macrotis Big Free-tailed Bat	Group 2, —/CSC/WBWG Medium to High Priority	Associated with desert shrub, woodlands, and evergreen forests, where there are high cliffs and rocky outcrops for roosting.	N	L	The boulders on the property provide suitable roosting habitat. However, there are no CNDDB records of this species within the San Pasqual quad (Fish and Wildlife, 2015a).
Odocoileus hemionus Southern Mule Deer	Group 2, —/—/—	Found in habitats with sufficient vegetative cover.	Y	Observed	Mule Deer tracks were noted in the muddy area near the marsh during the August 2015 visit.
Onychomys torridus ramona Southern Grasshopper Mouse	Group 2, —/CSC/—	Found in a variety of habitats, this carnivorous mouse eats mostly insects and other mice.	N	М	There are Chaparral elements on the property, and a number of other mice are anticipated on the property.
Taxidea taxus American Badger	Group 2, —/CSC/—	A fossorial species of open deserts and grassland habitats.	N	U	The terrain is too rocky to anticipate this fossorial species.
		Birds			
Accipiter cooperii Cooper's Hawk (nesting)	Group 1, —/WL/—	Nesting Cooper's generally use taller trees, including a number of horticultural species and native Oaks.	N	L	There are a few scattered mature Coast Live Oaks that could provide suitable nesting habitat.
Accipiter striatus Sharp-shinned Hawk (nesting)	Group 1, —/WL/—	Found where small birds congregate, typically where there are trees or tall shrubs.	N	U	There are no confirmed breeding records in San Diego County for the Sharpie (Unitt, 2004).
Agelaius tricolor Tricolored Blackbird (nesting colonies only)	Group 1, BCC/CSC/BLM Sensitive	Breeding colonies are limited to ponds with adjacent, undisturbed foraging habitat.	N	U	There are no ponds on the property.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Aimophila ruficeps ssp. canescens Rufous-crowned Sparrow	Group 1, —/WL/—	This species nests in Sage Scrub, open or burned Chaparral, and in Non-Native Grasslands with scattered shrubs.	Y	Observed	A single individual was heard in the southeast portion of the site. NOTE: Another common name for this sparrow is Southern California Rufous-crowned Sparrow.
Ammodramus savannarum Grasshopper Sparrow (nesting)	Group 1, —/CSC/—	Found in Native, and to a lesser extent, Non-Native Grasslands.	N	U	There are no grasslands on the property.
Aquila chrysaetos Golden Eagle (nesting and wintering)	Group 1, —/WL; Fully Protected/BLM Sensitive	The Golden Eagle nests on cliff ledges and forages in nearby grassland, Sage Scrub or Chaparral.	N	U	Suitable nesting habitat does not exist on the property, and the canopy of the Avocado trees probably precludes foraging Golden Eagles as well.
Artemisiospiza belli belli Bell's Sage Sparrow	Group 1, —/WL/—	This species prefers Sage Scrub and Chaparral habitats with an open canopy and areas of bare soil.	N	U	Although there are Chaparral elements, and marginal Sage Scrub habitats on the property, the Avocado trees provide a relatively closed canopy.
Athene cunicularia hypugaea Burrowing Owl (burrow sites)	Group 1, BCC/CSC/BLM Sensitive	This owl requires relatively flat terrain to enable the bird to survey its territory from the burrow hole. There are only five known nesting sites within the County. At these locations, the owl occurs in open grasslands, and open Sage Scrub habitats.	N	U	The property contains rocky terrain and is steeply sloped.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Branta canadensis Canada Goose (winter)	Group 2, —/—/—	Found in habitats that combine fresh or brackish water with low grass or succulent leaves. Usually congregate in a few large flocks. Commonly found near Lake Hodges, around Ramona and in the San Dieguito Valley. In northwestern SD County, pastures in the San Luis Rey valley are a center, especially near Bonsall.	N	ט	There are no nearby water sources that would attract this species to the property.
Buteo lineatus Red-shouldered Hawk	Group 1, —/—/—	Found in dense woods with clearings and water.	N	Н	A Red-shouldered Hawk was heard off-site to the west. The scattered Coast Live Oak trees onsite could provide suitable nesting locations, and there are numerous prey species on the property.
Buteo regalis Ferruginous Hawk (winter)	Group 1, —/WL/ BLM Sensitive	Found in arid grasslands and other treeless areas. Often perches on the ground, unlike other buteos. Nests in isolated trees.	N	U	The Avocado orchard provides too much canopy cover to anticipate this species.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Buteo swainsoni Swainson's Hawk	Group 1,—/CT/ FS Sensitive	Found on grasslands and farmlands. Nests in isolated trees. Usually solitary, but migrates in large flocks and large numbers concentrate at migration points. The Borrego Valley is on a migration corridor, the birds stopping to roost in strips of tamarisk trees and at nurseries.	N	Ū	The Swainson's Hawk no longer breeds in San Diego County (Unitt, 2004). The Gildred property is located in Ramona, which is not along their migration corridor.
Campylorhynchus brunneicapillum sandiegensis San Diego Cactus Wren	Group 1, BCC/CSC/FS Sensitive	Found in association with stands of <i>Opuntia</i> sp. and/or <i>Cylindropuntia</i> sp. along the coastal strip and lower foothills.	N	L	There is only one stand of native cacti on the property, and the property itself is located in the upper foothills. NOTE: Another common name for this subspecies is Coastal Cactus Wren.
Cathartes aura Turkey Vulture	Group 1, —/—/—	This species nests in rock crevices mainly in the mountains of San Diego County. However, non-breeders assemble in communal roosts elsewhere in the County.	N	Н	This species is known from the San Pasqual Valley to the north of the property.
Circus cyaneus Northern Harrier (nesting)	Group 1, —/CSC/—	A species of grasslands and marshes, nesting in the County is primarily near the coast, especially in the Tijuana River Valley and on Otay Mesa.	N	U	There are no grassland or marsh habitats on the property. NOTE: Circus cyaneus hudsonius is a synonym.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Coccyzus americanus occidentalis Yellow-billed Cuckoo	Group 1, BCC; pFE/CE/FS Sensitive	Found in extensive stands of mature riparian woods.	N	Ŭ	The riparian habitat along the western edge of the property is not dense enough or mature enough to expect this species.
Dendroica petechia brewsteri Yellow Warbler (nesting)	Group 2, BCC/CSC/—	Breeding occurs in mature riparian habitats, primarily along the coastal slope.	N	L	The riparian habitat along the western edge of the property does not seem dense enough or mature enough to expect this species.
Elanus leucurus White-tailed Kite (nesting)	Group 1, —/Fully Protected/—	This species nests in tall trees adjacent to foraging habitat that contains its primary prey, the California Vole (<i>Microtus californicus</i>).	N	L	The scattered Coast Live Oaks may provide suitable nest sites for this species. However, suitable habitat for the California Vole is not found on-site. NOTE: <i>Elanus caeruleus</i> is a synonym.
Empidonax traillii extimus Southwestern Willow Flycatcher (nesting)	Group 1, FE/CE/—	This species is restricted to wide riparian habitats, generally with flowing water.	N	U	The riparian habitat along the western edge of the property is too narrow to anticipate this species.
Eremophila alpestris actia California Horned Lark	Group 2, —/WL/—	A species of open (often disturbed), arid habitats, such as grasslands, coastal strand, and sandy deserts.	N	U	The property contains too much vegetative cover to anticipate this species.
Icteria virens Yellow-breasted Chat (nesting)	Group 1, —/CSC/—	In San Diego County, this bird is typically found in the coastal lowland where riparian woodlands occur.	N	U	The riparian habitat along the western edge of the property does not seem dense enough or wide enough to expect this species.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Lanius ludovicianus Loggerhead Shrike	Group 1, BCC/CSC/—	In San Diego County, the Loggerhead Shrike is most numerous in the desert, but it is also known from Sage Scrub, Chaparral, and Grassland habitats.	N	L	There are Chaparral elements, as well as, marginal Sage Scrub habitats on the property, and the species has been known to winter in the San Pasqual quad (Unitt, 2004)
Larus californicus California Gull (nesting colony)	Group 2, —/WL/—	The California Gull is found along the coast during the winter. However, a few non-breeding individuals remain in the County during the summer.	N	U	The property is too far inland to expect this species.
Plegadis chihi White-faced Ibis (rookery site)	Group 1, —/WL/—	This Ibis nests in freshwater marshes and forages in shallow water and wet grass.	N	U	While there is a small area of marsh habitat on the property, the hydrology is ephemeral.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Polioptila californica Coastal California Gnatcatcher	Group 1, FT/CSC/—	An obligate inhabitant of Sage Scrub or sometimes Chaparral where the two habitats intermix.	N	L	There is an isolated 0.59-acre patch of Sage Scrub habitat dominated by Deerweed in the northwest corner of the site. California Gnatcatchers are not anticipated to occur in this <1-acre patch. There is also 0.8-acre of recovering Sage Scrub habitat in the northeast corner of the property that is connected to Sage Scrub habitat off-site to the north/northwest. This on and off-site habitat was completely burned in the 2007 fire, but has largely recovered in the intervening ten years. The closest CNDDB California Gnatcatcher record is 1-mile to the southwest, south of Starvation Mountain (Fish and Wildlife, 2015a). However, this record is from 25 years ago. The next closest CNDDB record is 1.3-miles to the east near Rangeland Road (Fish and Wildlife, 2015a). However, this record is from 18 years ago. Given the almost fully recovered state of the 0.8-acre of Sage Scrub, its connectivity to off-site Sage Scrub, but the lack of current occurrences nearby, the probability of occurrence is low.

Scientific Name Common Name	Sensitivity Code and Status ²	Habitat Preference	Found On-site (Y or N)	Potential On-site ³	Factual Basis for Potential
Sialia mexicana Western Bluebird	Group 2, —/—/—	Found in areas with a combination of trees and open ground.	N	M	This species is known from the San Pasqual quad in both summer and winter (Unitt, 2004).
Vireo bellii pusillus Least Bell's Vireo	Group 1, FE/CE/—	An obligate inhabitant of dense, fairly broad, riparian woodlands with adjacent uplands that provide foraging habitat.	N	L	The riparian habitat may be too sparse to anticipate this species.

¹ This sensitive wildlife list is based on a search of the California Natural Diversity Database (CNDDB), the County of San Diego Sensitive Animal List taken from San Diego, County of. 2010. County of San Diego Guidelines for Determining Significance and Report Format and Contents for Biological Resources. Fourth Revision. Available from the County's website at http://www.sdcounty.ca.gov/dplu/docs/Biological_Guidelines.pdf, and Fish and Wildlife, California Department of. 2015. California Natural Diversity Data Base: Special Animals. The Author, Sacramento, California, 65 pp. [available at http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPAnimals.pdf], edition of July 2015.

FE — Federal Endangered

pFE — A petition for Federal Endangerment status has been submitted

FT — Federal Threatened

D — Delisted from the Endangered Species Act

BCC — Birds of Conservation Concern on the BCC 2008 list within BCR 32

CE — State Endangered

CT — State Threatened

CSC — California Special Concern species

WL — California Department of Fish and Game Watch List

AFS EN — defined as an endangered species by the American Fisheries Society

Fully Protected — A species for which special state legislation exists protecting the species

FS Sensitive — defined as a sensitive species by the USDA Forest Service

BLM Sensitive — defined as a sensitive species by the Bureau of Land Management

WBWG — priority status as defined by the multi-agency Western Bat Working Group

X-CI — defined as critically imperiled by the Xerces Society

² The status codes are given in the sequence "County Group, federal/state/other." A "—" indicates no status at that level. The codes used are defined as follows:

³ The "Potential On-site" column assesses the potential for the particular species to occur on the subject property given the known habitat preferences and distribution of that species. The codes used in this column are defined as follows:

Observed — Individuals of this species were found within the bounds of the site.

- H The potential for occurrence is "high". Habitats on-site are considered suitable for the species, and the species is known from the immediate vicinity.
- M The potential for occurrence is "medium". Habitats and conditions on-site are considered possible for the species.
- L The potential for occurrence is "low". The habitats present on-site are marginal for the species and/or extremely limited in extent. In other words, the species is not anticipated, but it's occurrence can not be precluded.
- U The potential for occurrence is "unlikely". The habitat and/or food requirements of the species are not present on the subject property.

Table 5

Summary of the Project With a Discretionary Permit Within an Approximate 1-mile Radius¹ of the Gildred TPM 21176 Resulting in Biological Impacts Similar to Those Associated with the Proposed Gildred TPM 21176

Assessor's Parcel Number(s)	Project Reference Number/ Project Name	CEQA Document	Proposed Mitigation	Status
276-023-15-00	TPM 20466/ Sgobassi	MND	For 1.6-acres of impacts to Coast Live Oak Woodland, and 16.2-acres of impacts to Coastal Sage Scrub, mitigation ratios applied per BMO. Mitigation to be satisfied through combination of on-site open space easement and off-site mitigation	Open Space Easement dedicated and Off-site Mitigation purchased

¹ The limits of the cumulative analysis area were northwest of the intersection of Highland Valley Road and Rangeland Road to the Poway municipal boundary.

Appendix A

Wetland Delineation Over Portions of the Gildred TPM 21176

Prepared by
Cummings and Associates
7 June 2016

Wetland Delineation Over Portions of the Gildred TPM 21176 County of San Diego, California

Prepared For:

The Gildred Companies 550 W. C. St., Suite 1820 San Diego, CA 92101

Prepared By:

Gretchen Cummings

Cummings and Associates P.O. Box 1209 Ramona, CA 92065 (760)440-0349

> Revised 7 June 2016 Revised 23 October 2015 Revised 16 September 2011 10 September 2010 Job Number 1612.34C

Cummings and Associates

Wetland Delineation Over Portions of the Gildred TPM 21176 County of San Diego, California

Introduction. The Gildred TPM 21176 is located in the northwestern part of the Ramona community in unincorporated San Diego County. The 53.1-acre parcel is specifically found north of, and adjacent to, Highland Trails Drive and east of, and adjacent to, Highland Valley Road (see Figure 1). Currently, the majority of the property is operated as an Avocado orchard. The development plans for the property include a subdivision that would create four single-family detached residential lots and a sizeable open space easement. In order to determine potential wetland impacts resulting from subdivision of the property and the subsequent grading and construction, a wetland delineation was conducted over portions of the property that are proposed to be disturbed and suspected of containing wetlands or "waters of the U.S." (see Figure 1).

Summary of Wetland Regulations. Wetlands may be regulated by several different agencies or jurisdictions with several different definitions of wetlands. As a result, a particular wetland may have more than one jurisdictional boundary. Federally defined wetlands fall under the jurisdiction of the U.S. Army Corps of Engineers (ACOE), and the Regional Water Quality Control Board (RWQCB) pursuant to Sections 404 and 401 of the Clean Water Act (CWA), respectively. State-defined wetlands fall under the jurisdiction of the California Department of Fish and Wildlife (CDFW) pursuant to Section 1600 of the California Fish and Game Code. Within the County of San Diego, wetlands are defined in the Resource Protection Ordinance (RPO). Any impacts proposed to these wetlands need to be quantified, permits obtained and mitigation carried out.

For the purposes of federal regulatory programs, federal wetlands are defined as areas meeting *all three* of the following criteria:

- 1. A predominance of hydrophytic vegetation; and
- 2. Sufficient hydrology (or water flow) such that there is an anaerobic growing condition in the soil for at least one week during the growing season; and
- 3. A predominance of hydric soils.

In addition to federal wetlands, "waters of the United States" are also regulated by the ACOE under Section 404 of the Clean Water Act. In non-tidal situations, "waters of the U.S." are delineated by the Ordinary High Water Mark (OHWM) which is defined as, ". .the line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural lines impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation or presence of litter and debris. ."

The CDFW and the County of San Diego RPO also use the same three criteria to define wetlands: hydrophytic vegetation, hydrology, and hydric soils. However, for CDFW and the County, the presence of *one or more* of the indicators is sufficient to define an area as a state "wetland" or a County "RPO wetland".

Methodology. Based upon the Preliminary Grading Plan provided to Cummings and Associates by Landmark Engineering Corporation in 2011, three drainage areas (A, B and C) were targeted as potentially containing wetlands or "waters of the U.S." that were anticipated to be filled during construction. Drainage area A is located along the southeastern property boundary of TPM 21176. The drainage is roughly parallel to Highland Trails Drive (see Figure 1). Drainage area B originates in the western/central portion of the property and drains to the west towards Highland Valley Road, then turns to the north and drains toward the north parallel to Highland Valley Road (see Figure 1). Drainage area C is shown as a blue-line stream on the U.S.G.S. map that enters the property near along the western-central property boundary and drains to the north across the property where it exists the site along the northern property boundary and continues to drain to the north into Santa Maria Creek (see Figure 1). However, the topography on-site does not match this drainage pattern exactly. On-site, the headwaters to drainage Area C seem to originate approximately 500-feet to the south of the northern parcel boundary. Given the small amounts of potential impact areas, a total of four sampling points were marked and assessed within the three drainage areas during 2011 (see Figure 1). The 2011 assessment included completion of the attached Wetland Determination Data Forms which involved identification of surrounding vegetation, documentation of hydric soils, marking the Ordinary High Water Mark (OHWM), and digging pits to identify hydric soils and hydrologic indicators. Cummings and Associates revisited the locations of the 2011 sampling points in 2015 and confirmed that the conditions on-site and the proposed impacts remain the same as they were four years previous.

Results. Only one of the three drainage areas (area B) contained jurisdictional wetlands and "waters of the U.S." (see Figure 2). The other drainage areas (areas A and C) did not contain jurisdictional wetlands or "waters of the U.S".

<u>Drainage Area A - Sampling Point A-1.</u> Since only a driveway is proposed in this area, only one sampling point was necessary (Sampling Point A-1; see Figure 1). The drainage itself contains intermittent OHWMs created from runoff from the adjacent paved Highland Trails Drive. At Sampling Point A-1, there was no OHWM or hydric soil indicators, nor was there a predominance of hydrophytic vegetation (see attached Wetland Determination Data Form for A-1). As such, this area did not contain federal wetlands, CDFW or County RPO wetlands, or "waters of the U.S.".

<u>Drainage Area B - Sampling Points B-1 and B-2.</u> Drainage area B currently contains two, 30-inch culverts underneath an existing dirt road utilized for the orchard activities on-site. Two of the four proposed parcels created through subdivision of the property will be accessed via this road. As such, the road will need to be widened and rip rap will need to be replaced/added. Therefore, in order to determine the amount of wetlands and/or "waters of the U.S." in this drainage that will be affected by the road widening and improvements, two sampling points were made (Sampling Points B-1 and B-2; see Figure 1).

Flow into and out of the existing culverts was obvious in this area as OHWMs. Due to the lack of hydrophytic vegetation in or overhanging the OHWMs, the areas immediately upstream and downstream from the culverts were identified as "waters of the U.S." (see Figure 2 and attached

Wetland Determination Data Forms for B-1 and B-2). These "waters of the U.S." extend upstream from the culvert inlets for approximately 8-feet at widths ranging from 5-feet to 5-feet 11-inches. Downstream from the culvert outlets, the "waters of the U.S." extend approximately 30-feet ranging in widths of 5-feet to 7-feet 5-inches. Approximately 8-feet east of the culvert inlets, there is a freshwater marsh dominated by Cattails (Typha latifolia) that qualifies as federal wetlands. As shown on Figure 2, a proposed 30-foot fuel modification zone along the access road overlaps this wetland habitat. However, the applicant has requested a waiver of fuel modification in these areas which was granted by the Ramona Fire Prevention Bureau in a letter dated August 22, 2011. Approximately 30-feet west of the culvert outlets, there is riparian habitat designated as Mule Fat Scrub that extends along this drainage adjacent to Highland Valley Road almost to the northwest corner of the property. The OHWM continues from the culvert outlets underneath the canopy of the Mule Fat Scrub and is considered to be federal wetlands. As with the freshwater marsh, a proposed 30-foot fuel modification zone along the access road overlaps this riparian habitat. Again, the applicant has requested a waiver of fuel modification in these areas which was granted by the Ramona Fire Prevention Bureau in a letter dated August 22, 2011. Therefore, based upon the Preliminary Grading Plan, it appears as though only minimal amounts of "waters of the U.S." will be impacted as a result of this project.

Drainage Area C - Sampling Point C-1. This drainage area is proposed to be filled, both on- and off-site, in association with TPM 21176. Although the U.S.G.S. map indicates that this drainage is a blue-line stream that passes through the subject property continuing on to the north to join with the Santa Maria Creek, topography on-site indicates that the headwaters of the drainage area actually originate on-site approximately 500-feet south of the northern property boundary. As such, the portions of the drainage to be filled are located at the headwaters of the drainage. These headwaters on-site did not contain an OHWM, hydrophytic vegetation, or hydric soil indicators, and therefore, the area was not considered to contain federal wetlands or "waters of the U.S." (see attached Wetland Determination Data Form for C-1). At this point, it should be mentioned that there is an existing dirt road that intersects this drainage area off-site just beyond the daylight line of the proposed fill material. The inclination of the dirt road has caused erosion gullies that appear to empty into the drainage in the opposite direction of the natural drainage flow. As such, there are intermittent OHWMs created from this unnatural condition. Since the OHWMs were intermittent off-site, the portion of the drainage to be filled off-site is not considered to contain "waters of the U.S.".

Conclusion. The subdivision of the property and subsequent construction associated with TPM 21176 will result in temporary impacts to approximately 150-square feet (30-lineal feet) of "waters of the U.S.", and permanent impacts to approximately 175-square feet (30-lineal feet) of "waters of the U.S.". An ACOE 404-Permit (Nationwide Permit 29) and RWQCB 401 Certification will therefore be required. The Project Proponent has conferred with the CDFW. Due to the low impacts, a Streambed Alteration Agreement (SAA) may not be required. Out of an abundance of caution, the Project Proponent will submit a Notification of Lake or Streambed Alteration to the CDFW, and the CDFW will determine whether a SAA is required.

Gretchen Cummings

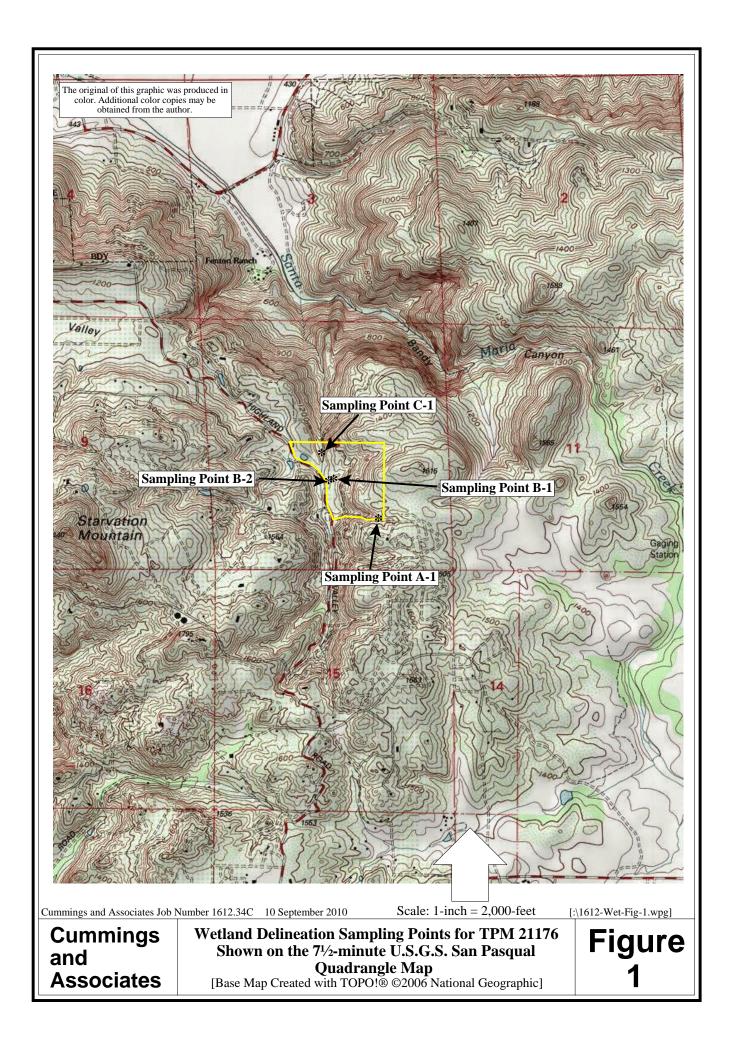
Gretchen Cummings

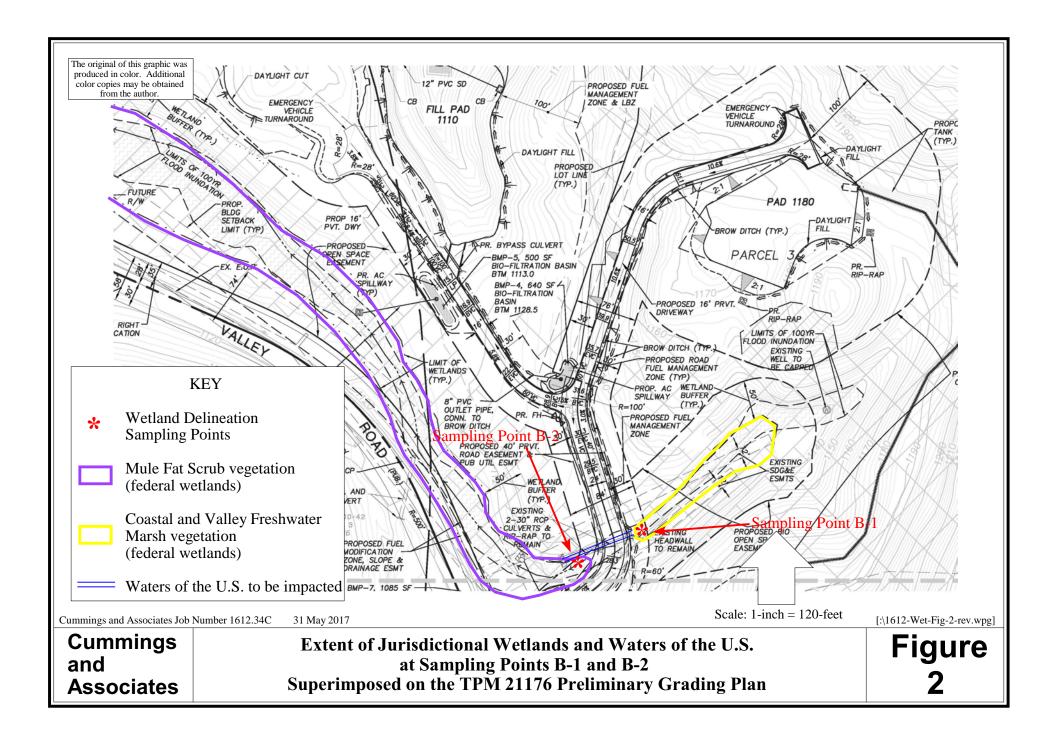
Principal/Biological Consultant

Job Number 1612.34C 10 September 2010 Revised 16 September 2011 Revised 23 October 2015 **Revised** 7 June 2016

Attachments:

- 1. Figure 1 Wetland Delineation Sampling Points for TPM 21176 Shown on the 7½-minute U.S.G.S. San Pasqual Quadrangle Map
- 2. Figure 2 Extent of Jurisdictional Wetlands and Waters of the U.S. at Sampling Points B-1 and B-2 Superimposed on the TPM 21176 Preliminary Grading Plan
- 3. Wetland Determination Data Forms
- 4. Bibliography and References Cited





WETLAND DETERMINATION DATA FORM - Arid West Region

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(includes capillary fringe)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Storm drain formers water into this area from across
the street - captured from irrigation of Avocados.
Deeply incised ~ 15' east of A-1, but OHWM quickly disappears.

WETLAND DETERMINATION DATA FORM - Arid West Region

vestigator(s): Setchan Comming and form (hillslope, terrace, etc.): floodplain	9		ange: 10, 13 5, 1 60 Concever Slope (%): 0
ubregion (LRR): LRR C	Doubling -	3657564	Long: NAD
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			Total Number of Dominant Species Across All Strata: (B)
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			FACW species x 2 =
			FAC species x 3 =
20000	0%-1	otal Cover	FACU species x 4 =
ferb Stratum (Plot size: 20×20)	50%	11 201	UPL species x 5 =
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Calystegia macrostegia	10%	N -	Prevalence Index is ≤3.0
300012 11300 314			Morphological Adaptations (Provide supporting
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AND THE RESIDENCE OF THE PROPERTY OF THE PROPE	er of Biotic Crust	0%	Present? Yes No
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Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Malinx Richok-histures Golor (moist) Sk. Type. Loc. Texture Remarks O-5" (OYR 3)1 IOYR 4/3 Coerse Sandy Indicators Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A)1 Histosol (A)2 Histic Epipedon (A2) Flage Nicolation (A)3 Flage Nicolation (A)4 Flage Nicolation (A)5 F	Destile Desses	testions (Planarity of the floor of a	At a manufact to the state of	mark the t			a due ababase at tautautuse V	3-1_	
Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains *Location: PL=Para Linning, M=Matrix, Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: 1 om Muck (A1) (LRR C) 1 om Muck (A1) (LRR C) 2 cm Muck (A1) (LRR C) 2 cm Muck (A1) (LRR C) 3 linning (LRR C) 4 linning (LRR C						or contin	m the absence of indicators.)		
Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains: *Location: PL-Para Lining, M-Matrix, Mydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Histosal (A1)						Loc²	Texture Remarks		
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Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains		The second secon		les in			Andrew Control of the		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Santy Redox (S5) Histosol (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) To m Muck (A9) (LRR B) Reduced Vertic (F18) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) To m Muck (A9) (LRR D) Depleted Matrix (F2) Depleted Matrix (F2) Depleted Dark Surface (F2) Think Dark Surface (A11) Depleted Dark Surface (F2) Think Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Depth (inches): Remarks: Primary Indicators Iminimum of one required: check all that apply) Surface Water (A1) Surface Water (A1) Surface Water (A1) Surface Water (A1) Surface (A2) Surface Water (A1) Surface Water (A2) Surface (A2) Aquatic Invertebrates (B13) Water Marks (B1) (Rivertine) Surface Marks (B1) (Nonriverine) Surface Water Marks (B1) (Nonriverine) Surface Soil Cracks (B5) Water Marks (B1) (Nonriverine) Surface Soil Cracks (B5) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Surface Soil Cracks (B5) Recent from Reduction in Tilled Soils (C8) Surface Soil Cracks (B5) Recent from Reduction in Tilled Soils (C8) Surface Soil Cracks (B5) Recent from Reduction in Tilled Soils (C8) Surface Soil Cracks (B5) Recent from Reduction in Tilled Soils (C8) Surface Soil Cracks (B5) Recent from Reduction in Tilled Soils (C8) Surface Soil Cracks (B5) Facent from Reduction in Tilled Soils (C8) Surface Soil Cracks (B5) Facent from Reduction in Tilled Soils (C8) Surface Soil Cracks (B5) Thin Muck Surface (C7) Shallow Aquillard (D3)	3.01	IOIN 113					00-1363-104		
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Sandy Mucky Mineral (S1) Vernal Pools (F9) welland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type:	Depleted	Below Dark Surface (A11)					and the second s		
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Type:							unless disturbed or problematic.		
Depth (inches): Remarks: Remarks: Redox concentrations all within the top 5", none noted below 5".		ayer (ii present):							
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Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3)		A STATE OF THE PROPERTY OF THE				Contract of the last		de transport	
	the second second	and the second s	And the second s			1 Soils (C		agery (C	
Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5)					40.00		Shallow Aquitard (D3) FAC-Neutral Test (D5)		
	ricia Observ	auons:							
Field Observations: Surface Water Present? Yes No X Depth (inches):	A								

Remarks:

Water Table Present?

Saturation Present? (includes capillary fringe).

OHWH was measured to be 5'11" @ sampling point. The OHWH decreases in width to 5'0" where it enters as existing cuberts.

No X Depth (Inches):

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Wetland Hydrology Present? Yes X

	17	
State See	Man 1	
Power	13.0	

Sampling Point

Depth	Matrix	-17		x Features	-	-		
(inches)	Color (moist)	_%	Color (moist)	%	Type ¹	Loc2		Remarks
0-2"_	109R 3/2				_	_	smdy _	
2-5"	104Ra/1	-			_	_	loany sond	
5-14"	104R413			_	_	_	sondy_	
				-	-			
		زنب			_	_		
			Search and are as			Che sa		
			Reduced Matrix, CS			d Sand G		: PL=Pore Lining, M=Matrix.
	- A	ible to all L	RRs, unless other		a.)			Problematic Hydric Soils ³ :
Histosol (A Histic Epipe			Sandy Red Stripped Ma	The state of the s				(A9) (LRR C) (A10) (LRR B)
Black Histic			Loamy Muc		/E35		Reduced V	
- 10 To 10 T	Sulfide (A4)			ed Matrix (0		The second secon	Material (TF2)
	ayers (A5) (LRR C)	Depleted M					ain in Remarks)
	(A9) (LRR D)		The second secon	Surface (F	6)			The state of the s
Depleted B	lelow Dark Surface	(A11)	Depleted D	ark Surface	(F7)		2.0	
	Surface (A12)			ressions (F8	8)			drophytic vegetation and
	olty Mineral (S1)		Vernal Poo	ls (F9)				plogy must be present.
and the second s	yed Matrix (S4)						unless disturt	ped or problematic
	yer (if present):							
Type:			-				MEASE MED BUS	sent? Yes X No
	-T-4-7						Hydric Soil Pres	sent? Yes A No
Depth (inche Remarks.		יוש זה	licators, k	th tuc	ue s lein.	om pli		s on a vegetate
temarks.	hydric si sand b	al mo	licators, k	H toodpl	us len.	om pl		
PROLOG Wetland Hydro	hydric sz Sand bo Y plogy Indicators:				us lein.	om pl		
YDROLOG Wetland Hydro	hydric sz Sand bo Y plogy Indicators:		check all that appl	y).	us lein.	om pl	mg point i	
PROLOG Wetland Hydro	hydric Si Sand bo Y plogy Indicators: ors (minimum of or		check all that appl Salt Crust	v) (B11)	lesn.	ow bl	mg point i	s on a vegetated
YDROLOG' Wetland Hydro Surface W:	hydric Si Sand bo Y plogy Indicators: ors (minimum of or		check all that appl	v) (B11)	us len.	ow bl	ng point i Secondary Water Sedim	SON a vegatate of Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine)
YDROLOG* Wetland Hydro Surface W: High Water Saturation	hydric Sz Sand be Y plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3)	ne required	check all that appl Salt Crust Biotic Crus Aquatic In	v) (B11) st (B12) vertebrates	(B13)	ow bl	Secondary Secondary Sedim Drift D	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine)
Wetland Hydro Surface W: High Water Sturation Water Mark	hydric St Sand by plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriverli	ne required	check all that appl Salt Crust Biotic Crust Aquatic In	v) (B11) st (B12) vertebrates Sulfide Odo	(B13) or (C1)		Secondary Secondary Water Sedim Drift D Drains	SON a vegatate of Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine)
YDROLOG Wetland Hydro Primary Indicate Surface W: High Water Saturation X Water Mark X Sediment I	hydric Sand by y plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriverli Deposits (B2) (Non	ne recuired ne) riverine)	check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen	v) (B11) st (B12) vertebrates Suifide Odd Rhizosphere	(B13) or (C1) as along	l iving Re	Secondary Secondary Water Sedim Drift D Draina	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Pattems (B10) eason Water Table (C2)
Wetland Hydro Surface Wetland Water Surface Wetland Water Saturation X Water Mark X Sediment I	hydric Sand by Sand by plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) (A3) (A3) (B1) (Nonriverli Deposits (B2) (Nonriverli sits (B3) (Nonriverli	ne recuired ne) riverine)	check all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Oxidized F	v) (B11) st (B12) vertebrates Sulfide Odd Rhizosphere of Reduced	(B13) or (C1) es along I Iron (C4	l iving Ro	Secondary Secondary Water Sedim Drift D Draina ots (C3) Crayf:	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ige Pattems (B10) asson Water Table (C2)
Wetland Hydro Surface With High Water Saturation Weter Mark X Sediment I X Drift Depos	hydric Sand by Sand by plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriverli Deposits (B2) (Non sits (B3) (Nonriverli oil Cracks (B6)	ne required ne) iriverine) ine)	check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction	(B13) or (C1) es along I Iron (C4 n in Tillo	l iving Ro	Secondary Secondary Water Sedim Drift D Drains ots (C3) Sature Sature	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ige Patterns (B10) eason Water Table (C2) sh Burrows (C8) ition Visible on Aerial Imagery (C
Wetland Hydro Surface W: High Water Saturation X Water Mark X Sediment I X Drift Depos Surface So Inundation	Nydric Sa Sand by Diogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriverli Deposits (B2) (Nonriverli Diil Cracks (B6) Visible on Aerial In	ne required ne) iriverine) ine)	check all that appl Salt Crust Biotic Crust Aquatic In Itydrogen Oxidized F Presence Recent Iro	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosohere of Reduced in Reduction Surface (C	(B13) or (C1) es along f Iron (C4 n in Tilloo (7)	l iving Ro	Secondary Secondary Water Sedim Drift D Drains Ots (C3) Crayfi Satura Shalfo	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ige Pattems (B10) eason Water Table (C2) sh Burrows (C8) ition Visible on Aerial Imagery (City Aquitard (D3)
Wetland Hydro Primary Indicate Surface With High Water Saturation X Water Mart X Sediment I X Drift Depos Surface So Inundation Water-Stair	Y plogy Indicators: ors (minimum of orater (A1) r Table (A2) (A3) ks (B1) (Nonriverli Deposits (B2) (Nonriverli Dits (B3) (Nonriverli Dits (B3) (Nonriverli Visible on Aerial In	ne required ne) iriverine) ine)	check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosohere of Reduced in Reduction Surface (C	(B13) or (C1) es along f Iron (C4 n in Tilloo (7)	l iving Ro	Secondary Secondary Water Sedim Drift D Drains Ots (C3) Crayfi Satura Shalfo	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ige Patterns (B10) eason Water Table (C2) sh Burrows (C8) ition Visible on Aerial Imagery (C
YDROLOG YDROLOG Wetland Hydro Surface Wi High Water Saturation X Water Mark X Sediment I X Drift Depos Surface So Inundation Water-Stair	hydric Sa Sand by Sand by ology Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriveri Deposits (B2) (Non sits (B3) (Nonriveri oil Cracks (B6) Visible on Aerial In ned Leaves (B9) tions:	ne required ne) iriverine) ine) nagery (B7	check all that appl Salt Crust Biotic Crust Aquatic in Hydrogen Oxidized F Presence Recent Iro Uther (Exp	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction Surface (Colain in Ren	(B13) or (C1) es along I Iron (C4 n in Tillo (7) narks)	l iving Ro l) d Soils (Ci	Secondary Secondary Water Sedim Drift D Drains Ots (C3) Crayfi Satura Shalfo	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ige Pattems (B10) eason Water Table (C2) sh Burrows (C8) ition Visible on Aerial Imagery (City Aquitard (D3)
YDROLOG YDROLOG Wetland Hydro Surface With High Water Saturation X Water Mark X Sediment I X Drift Depos Surface So Inundation Water-Stair Field Observat	Y plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriverli Deposits (B2) (Non sits (B3) (Nonriverli ii Cracks (B6) Visible on Aerial In ned Leaves (B9) tions: Present? Ye	ne required ne) into into into into into into into into	check all that appl Salt Crust Biotic Crust Aquatic In Ifydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction Surface (Colaim in Rem ches):	(B13) or (C1) es along I Iron (C4 n in Tillo (7) narks)	l iving Ro l) d Soils (Ci	Secondary Secondary Water Sedim Drift D Drains Ots (C3) Crayfi Satura Shalfo	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ige Pattems (B10) eason Water Table (C2) sh Burrows (C8) ition Visible on Aerial Imagery (City Aquitard (D3)
YDROLOG' Wetland Hydro Surface W: High Water Saturation X Water Mark X Sediment I X Drift Depos Surface So Inundation Water-Stail Field Observat Surface Water	Y plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriverli Deposits (B2) (Non sits (B3) (Nonriverli oil Cracks (B6) Visible on Aerial In ned Leaves (B9) tions: Present? Ye esent?	ne) Intiverine) Inagery (B/	check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction Surface (Colain in Ren ches): ches):	(B13) or (C1) es along I Iron (C4 n in Tillo (7) narks)	l iving Re l) d Soils (C	Secondary Secondary Water Sedim Drift D Drains ots (C3) Crayfi Satura FAC-P	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) eposits (B10) eason Water Table (C2) sh Burrows (C8) ntion Visible on Aerial Imagery (Cav Aquitard (D3) leutral Test (D5)
Wetland Hydro Wetland Hydro Surface With High Water Saturation Water Mark X Sediment I X Drift Deposion Surface Solundation Water-Stain Field Observat Surface Water Water Table Pressaturation Press	Nydric Sa Sand by Plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriveria Deposits (B2) (Nonriveria id Cracks (B6) Visible on Aerial In ned Leaves (B9) tions: Present? Yesent?	ne) Intiverine) Inagery (B/	check all that appl Salt Crust Biotic Crust Aquatic In Ifydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction Surface (Colain in Ren ches): ches):	(B13) or (C1) es along I Iron (C4 n in Tillo (7) narks)	l iving Re l) d Soils (C	Secondary Secondary Water Sedim Drift D Drains Ots (C3) Crayfi Satura Shalfo	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) eposits (B10) eason Water Table (C2) sh Burrows (C8) ntion Visible on Aerial Imagery (Cav Aquitard (D3) leutral Test (D5)
YDROLOG YDROLOG Wetland Hydro Surface With Water Saturation X Sediment I X Drift Depose Surface So Inundation Water-Stain Water-Stain Field Observat Surface Water Water Table Pressurface Conductor Conduc	Y plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriveria Deposits (B2) (Non sits (B3) (Nonriveria) il Cracks (B6) Visible on Aerial In ned Leaves (B9) tions: Present? esent? ye sent? ye ary firinge)	ne) ine) ine) ine) inagery (B/	check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction Surface (Coolain in Rem ches): ches):	(B13) or (C1) es along I Iron (C4 n in Tillo (7) narks)	l iving Ro l) d Soils (C	Secondary Secondary Water Sedim Drift D Draina ots (C3) Satura Shalfo FAC-M	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) eposits (B10) eason Water Table (C2) sh Burrows (C8) ntion Visible on Aerial Imagery (Cav Aquitard (D3) leutral Test (D5)
Wetland Hydro Primary Indicate Surface Water Mart X Sediment I X Drift Depos Surface So Inundation Water-Stain Field Observat Surface Water Water Table Pri Saturation Press (includes capilla Describe Recor	Y plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriveria Deposits (B2) (Non sits (B3) (Nonriveria) il Cracks (B6) Visible on Aerial In ned Leaves (B9) tions: Present? esent? ye sent? ye ary firinge)	ne) ine) ine) ine) inagery (B/	check all that appl Salt Crust Biotic Crust Aquatic In Ifydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction Surface (Coolain in Rem ches): ches):	(B13) or (C1) es along I Iron (C4 n in Tillo (7) narks)	l iving Ro l) d Soils (C	Secondary Secondary Water Sedim Drift D Draina ots (C3) Satura Shalfo FAC-M	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) eposits (B10) eason Water Table (C2) sh Burrows (C8) ntion Visible on Aerial Imagery (Cav Aquitard (D3) leutral Test (D5)
Wetland Hydro Primary Indicate Surface With Water Mart X Sediment I X Drift Depos Surface So Inundation Water-Stair Field Observat Surface Water Water Table Pro Saturation Pres (includes capilla Describe Recor	Y plogy Indicators: ors (minimum of orater (A1) r Table (A2) (A3) ks (B1) (Nonriverial (B3) (Nonriverial (B3) (Nonriverial (B4) (Nonriver	ne) riverine) ine) nagery (B/ es N	check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Ex) Depth (in No X Depth (in Nitoring well, aerial	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosophere of Reduced in Reduction Surface (C olaim in Herr ches): ches): phatos, prev	(B13) or (C1) es along I Iron (C4 n in Tillo (7) narks)	l iving Ro	Secondary Water Sedim Drift D Draina ots (C3) Crayfi Shalfo FAC-fi	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Pattems (B10) eason Water Table (C2) sh Burrows (C8) ntion Visible on Aerial Imagery (C w Aquitard (D3) leutral Test (D5)
Wetland Hydro Primary Indicate Surface Water Mark X Sediment I X Drift Depos Surface So Inundation Water Stair Field Observat Surface Water Water Table Pri Saturation Press (includes capilla Describe Recor	hydric Sand by y plogy Indicators: ors (minimum of ore ater (A1) r Table (A2) (A3) ks (B1) (Nonriverli Deposits (B2) (Nonriverli Dit (B3) (Nonriverli Dit (B4) (Nonriverli Dit	ne) riverine) inc) nagery (B/	check all that apples Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized Foresence Recent Iro X Depth (in K Dept	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction Surface (Colain in Rem ches): ches): phatos, prev	(B13) or (C1) es along I from (C4 n in Tillor (7) nauks) vious ins	l iving Ro	Secondary Water Sedim Drift D Drains Ots (C3) Dry-Si Crayfi Shallo FAC-N If available	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ige Pattems (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C w Aquitard (D3) leutral Test (D5) esent? Yes X No
NOO IYDROLOG' Wetland Hydro Primary Indicate Surface With High Water Saturation X Water Mark X Sediment I X Drift Depose Surface So Inundation Water-Stain Field Observat Surface Water Water Table Pri Saturation Press (includes capilla Describe Recor	hydric Sand by y plogy Indicators: ors (minimum of or ater (A1) r Table (A2) (A3) ks (B1) (Nonriverli Deposits (B2) (Nonriverli Dil Cracks (B6) Visible on Aerial In ned Leaves (B9) tions: Present? Present? ye sent? ye ary fringe) rded Data (stream	ne) interine) inc) nagery (B/ es A es A gauge_moi	check all that apples Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized Foresence Recent Iro X Depth (in K Dept	v) (B11) st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction Surface (Colain in Ren ches): ches): ches): phatas, pren	(B13) or (C1) es along I from (C4 n in Tillor (7) nauks) vious ins	l iving Ro	Secondary Water Sedim Drift D Drains Ots (C3) Dry-Si Crayfi Shallo FAC-N If available	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Pattems (B10) eason Water Table (C2) sh Burrows (C8) ntion Visible on Aerial Imagery (C w Aquitard (D3) leutral Test (D5)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

WETLAND DETERMINATION DATA FORM - Arid West Region

vestigator(s): Gretchen Committee andform (hillslope terrace, etc.): Floodplain ubregion (LRR): LRR C pil Map Unit Name: Vista coarse sand te climatic / hydrologic conditions on the site typical for	Morthing that I would	ocal relie 365 15-3	ef (concave, o 17550 10% Sto	convex none): COCCCC Englished 50074() DRD NWI classification	OR Slope (%): C O Datum: NAD on: Palustone
	_significantly di			Normal Circumstances" pres	
re Vegetation, SoilX, or Hydrology				edeo, explain any answers i	
UMMARY OF FINDINGS – Attach site ma		ampli	ng point k	ocations, transects, ii	mportant features, et
Hydrophytic Vegetation Present? Yes X Hydric Soil Present? Yes X Wetland Hydrology Present? Yes X	No No	100.0	the Sampled hin a Wetlar	1.6	No
Remarks:					
EGETATION – Use scientific names of pla	ants.				
	Absolute	Dominar	The state of the s	Dominance Test workship	cet
ree Stratum (Plot size; 20 x 20) Salix Lasiolepis	% Cover	Species'	FACW	Number of Dominant Spec That Are OBL, FACW, or F	
·				Total Number of Dominant	
i				Species Across All Strata:	4
K	80%	Total C	Cover	Percent of Dominant Spec That Are OBL FACW, or F	
Sapling/Shrub Stratum (Plot size; 20x20) 1. Selt x Installa (Plot size)	20%	U	FACW	Prevalence Index worksh	
Selly 14310 mp13	0/0/8	-1	TACO	Frevalence index works:	Multiply by:
				OBL species	x1 =
k				FACW species	x2=
+	-			FAC species	x 3 =
lerb Stratum (Plot size: 20メ30)	20%	= Total C	OVCI	FACU species	
terschild: a moena	10%	V	UPL	UPL species	
Heterotheca grandiflora	1%	N	-	Column Totals:	(A) (B
I WELLOUITECH GLANDING	170	1.4		Prevalence Index =	B/A =
4				Hydrophytic Vegetation I	Indicators:
				X Dominance Test is >5	0%
				Prevalence Index is ≤	3.01
				Morphological Adapta	tions1 (Provide supporting
1					on a separate sheet)
20-20	11% :	Total C	over	Problematic Hydrophy	tic Vegetation' (Explain)
Moody Vine Stratum (Plot size: 20 x 20)				Uniducations of trades and as	nd wetland hydrology must-
1			-	be present, unless disturbs	ed or problematic.
-	0%	= Total C	Service .	Hydrophytic	ON COLUMN STATE
% Bare Ground in Herb Stratum 30% % Co			0%	Vegetation	X
Maria Appropriate The Maria Control of the Control	ver of Biotic Cru	st	0 16	Present? Yes_	X No
Remarks:					

WETLAND DETERMINATION DATA FORM - Arid West Region

Applicant/Owner The Gildred Connection Committee	ngs	Section, 1	Township, Ra	inge: 10,135,1W
andform (hillslope, terrace, etc.): hillslope	9	Local reli	ef (concave,	convex none): CONCAVE Slope (%): 6
Subregion (LRR): LRR	Dertha	336	57733	Long: 502690 Datum: NA
Spil Map Unit Name: Cieneby - Fallbrook	rocky	sandy	loems 2	30-65% NWI classification:
are climatic / hydrologic conditions on the site typical for t	his time of year	ar? Yes	X No	(If no, explain in Remarks.)
Are Vegetation Soil, or Hydrology				"Normal Circuinstances" present? Yes X No
Are Vegetation, Soil, or Hydrology				eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map				The state of the s
Hydrophytic Vegetation Present? Yes				
Hydric Soil Present? Yes		11000	the Sampled	
A COLOR OF THE REPORT OF THE PROPERTY OF THE P	No X	wit	thin a Wetla	nd? YesNoX
Remarks:				
/EGETATION – Use scientific names of pla	nts.		=	
New Sure	Absolute	Dominar	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20 x 20)	% Cover	Species'	? Status	Number of Dominant Species
· Perseq americana	1%	_Y		That Are OBL. FACW, or FAC:(A
2				Total Number of Dominant
3				Species Across All Stratal
4	10.			Percent of Dominant Species 1/2
Sapling/Shrub Stratum (Plot size: 20 x 30)	1%	Total C	lover	That Are OBL, FACW, or FAC. 33% (A
1. Halacothamnus fesciculatos	25%	4	-	Prevalence Index worksheet:
2 Artemisic californica	5%	N	_	Total % Cover of: Multiply by:
3. Phacelia remosissima	2%	N	FACU	OBL species x 1 =
4				FACW species x 2 =
5				FAC species x3 =
20420	32%	= Total C	over	FACU species x4 =
Herb Stratum (Plot size: 20x20)	500	U	TAC	UPL species x 5 =
2 Bromus madrifeness rubens	30%	N	FAC	Column Totals: (A)
a Hirschfeldiaineng	10%	N	UPL	Prevalence Index = B/A =
4. Hardeum murinum s.sp. Lepori		N	UPL	Hydrophytic Vegetation Indicators:
5	176	N	-01-	Denimance Test is >50%
6:		-		Prevalence Index is: <3.0
7				Morphological Adaptations (Provide supporting
ô				data in Remarks or on a separate sheet)
10,000	121%	= Total C	over	Problematic / lydrophytic Vegetation (Explant)
Woody Vine Stratum (Plot size: 20420)		- 1 4000	100	Victoria de la Carta de Carta
fr.			-	Indicators of hydric soil and welland hydrology mus- be present, unless disturbed or problematic.
2	- 02			
a.D		Total C		Hydrophytic Vegetation
% Bard Ground in Herb Stratum 076	er of Biotic Cr	ust(0%	Present? Yes No X
Remarks:				

Sampling Point C-1

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand G Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histic (A3) Black Histic (A3) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Strabified Layers (A5) (LRR C) Color (moist) % Type¹ Loc² Color (moist) % Type¹ Loc² Selection (Matrix, CS=Covered or Coated Sand G Harrix, CS=Covered or Coated Sand G Sandy Redox (S5) Stripped Matrix (S5) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Strabified Layers (A5) (LRR C) Depleted Matrix (F3)	Texture Remarks Stains **Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils*; 1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand G lydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosof (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ ;1 cm Muck (A9) (LRR C)
Stratified Layers (A5) LRR C) LRR C LRR C LRR C	Indicators for Problematic Hydric Soils ³ : 1 cm Muck (A9) (LRR C)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Indicators for Problematic Hydric Soils ³ : 1 cm Muck (A9) (LRR C)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Indicators for Problematic Hydric Soils ³ : 1 cm Muck (A9) (LRR C)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Indicators for Problematic Hydric Soils ³ : 1 cm Muck (A9) (LRR C)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Indicators for Problematic Hydric Soils ³ : 1 cm Muck (A9) (LRR C)
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Historol (A1) Sandy Redox (S5) Historol (A2) Stripped Matrix (S6) Black Histor (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Indicators for Problematic Hydric Soils ³ : 1 cm Muck (A9) (LRR C)
Hydric Soli Indicators: (Applicable to all LRRs, unless otherwise noted.) Historol (A1) Sandy Redox (S5) Histor Epipedon (A2) Stripped Matrix (S6) Black Histor (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Indicators for Problematic Hydric Soils ³ : 1 cm Muck (A9) (LRR C)
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Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Reduced Vertic (F18)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Red Parent Material (TF2)
	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)	- Address Amsternation of the contractors.
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7)	
Thick Dark Surface (A12) Redox Depressions (F8)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Vernal Pools (F9)	welland hydrology must be present.
Sandy Gleyed Matrix (S4)	unless disturbed or problematic.
Restrictive Layer (if present):	
Type:	X
Depth (inches):	Hydric Soil Present? Yes No
no redox concentrations	
YDROLOGY	
Welland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all (hat apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Sait Crust (B11)	Water Marks (R1) (Riverine)
High Water Table (A2) Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation (A3) Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine) — Oxidized Rhizospheres along Living Ro	
Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Surface Soil Cracks (86) Recent Iron Reduction in Tilled Soils (C	
Inundation Visible on Aerial Imagery (87) Thin Muck Surface (87)	Shallow Aquitard (D3)
Water Stained Leaves (B9) Other (Explain in Remarks)	FAC Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
	tland Hydrology Present? Yes No X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections) Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections) Remarks:	

REFERENCES CITED

- Beauchamp, R. Mitchel. 1986. A Flora of San Diego County, California. Sweetwater River Press. National City, Calif., 241 pp.
- Bowman, Roy H., et al. 1973. Soil Survey of the San Diego Area, California. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Federal Interagency Committee for Wetland Delineation. 1989. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S.D.A. Soil Conservation Service, Washington, D.C. Cooperative technical publication. 76 pp. plus appendices.
- Fish and Wildlife Service, National Wetlands Inventory, Ecology Section. 1997. National List of Vascular Plant Species that Occur in Wetlands: 1996 National Summary. 209 pp.
- Hickman, James C. ed. 1996. The Jepson Manual: Higher Plants of California. University of California Press, Berkeley, xvii + 1400 pp.
- Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, California. iii + 155 pp.
- Kollmorgen Corporation. 1975. Munsell Soil Color Charts. MacBeth Division of Kollmorgen Corporation, Baltimore, Maryland, 4 pp. + 8 plates.
- Mitsch, William J., and J. G. Gosselink. 2000. Wetlands. John Wiley & Sons, New York, 3rd ed., xiii + 920 pp.
- Richardson, J. L. and M. J. Vepraskas, eds. 2001. Wetland Soils. CRC Press LLC, Boca Raton, FL, 417 pp.
- San Diego County of. 2007. Resource Protection Ordinance (Ordinance Numbers 7968, 7739, 7685, 7631, and 9842 (New Series)). Document available from the Department of Planning and Land Use, 18 pp.
- U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- United States Department of Agriculture, Natural Resources Conservation Service. 2010. *Field Indicators of Hydric Soils in the United States*, version 7.0. L.M. Vasilas, G.W. Hurt, and C.V. Noble (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

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Appendix C

Letter to Jim Whalen from the USFWS Dated March 11, 2011 Regarding the Project's Need for a Permit Under the Bald and Golden Eagle Protection Act



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Pacific Southwest Region 2800 Cottage Way W-2606 Sacramento, CA 95825

11 March 2011

Mr. Jim Whalen J. Whalen Associates, Inc 1660 Hotel Circle N., Suite 725 San Diego, CA 92108

Subject: Gildred Highland Housing Development Project's need for a permit under the Bald and Golden Eagle Protection Act

Dear Mr. Whalen:

This letter is in reference to the Gildred Highland project, a proposed small housing subdivision (TPM 21176) located along Highland Valley Road in the vicinity of Ramona (San Diego County), California. There is a known Golden Eagle nest that exists within one mile of the proposed development; however, that nest is shielded from view of this subdivision site by the cliff face on which it is located.

The bald eagle and the golden eagle are protected under the Bald and Golden Eagle Protection Act (BGEPA, 16 U.S.C. 668-668c) and the Migratory Bird Treaty Act (16 U.S.C. 703-712). Under the BGEPA, "take" means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb. "Disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause injury to an eagle or either a decrease in its productivity or nest abandonment due to interference with breeding, feeding, or sheltering.

The Service also has conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 et seq.). The proposed project should be evaluated for potential impacts to migratory birds in the area. Under the MBTA, nests (nests with eggs or young) of migratory birds may not be harmed, nor may migratory birds be killed. Such destruction may be in violation of the MBTA. Therefore, land clearing, or other surface disturbance associated with proposed projects, must be conducted outside the avian breeding season to minimize disturbance to eagles and avoid potential destruction of bird nests or young, or birds that breed in the area. If this is not feasible, a qualified biologist should conduct a survey of the area prior to land clearing. If nests are located, or if other evidence of nesting (i.e., mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat



requirements of the species) should be delineated and the area avoided to prevent destruction or disturbance to nests until they are no longer active.

The U.S. Fish and Wildlife Service (Service) has determined that the Gildred Highland housing development proposed project site is not suitable as breeding, foraging, or roosting habitat for Golden Eagles since the majority of the site is currently an avocado orchard. Considering the placement context of the existing eagle nest, its proximity to the proposed development, and the scale of the proposal, the Service has determined that the housing development will not likely result in "take" of the resident eagles and thus a take permit under the Bald and Golden Eagle Protection Act is not warranted.

Please be advised that this determination does not limit or preclude the Service from exercising its authority under any law, statute, or regulation, nor does it release any individual, company, or agency of its obligations to comply with Federal, State, or local laws, statutes, or regulations.

Should you have any further questions about eagle permit issues, please contact Heather Beeler, Eagle Permit Specialist, at heather_beeler@fws.gov or 916-414-6651.

Marie Strasbugo

Marie Strassburger

Regional Migratory Bird Chief

Appendix D

Conceptual Revegetation Plan for Impacts to Non-wetland Waters of the U.S. Associated with the Gildred TPM 21176

Prepared by
Gretchen Cummings
Cummings and Associates
7 June 2016

Conceptual Revegetation Plan for Impacts to Non-wetland Waters of the U.S. County of San Diego, California

[County of San Diego TPM 21176; Log No. 3910-10-09-003]

Prepared for:

The County of San Diego Department of Planning and Land Use 5201 Ruffin Road, Suite B San Diego, CA 92123

Project Proponent:

The Gildred Companies 550 W. C. St., Suite 1820 San Diego, CA 92101

Prepared By:

Gretchen Cummings

Consulting Biologist Cummings and Associates P.O. Box 1209 Ramona, CA 92065 (760)440-0349

> Revised 7 June 2016 Revised 21 December 2015 Revised 23 October 2015 Revised 29 September 2011 7 March 2011 Job Number 1612.34C

Conceptual Revegetation Plan for Impacts to Non-wetland Waters of the U.S. County of San Diego, California

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5201 Ruffin Road, Suite B
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Prepared By:

Gretchen Cummings Cummings and Associates P.O. Box 1209 Ramona, CA 92065

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CHAPTER 1 DESCRIPTION OF THE DEVELOPMENT PROJECT/IMPACT SITE FOR WHICH COMPENSATORY MITIGATION IS REQUIRED

Tentative Parcel Map 21176 involves the proposed subdivision of the 53.1-acre Gildred property into four new lots. The parcel currently operates as an Avocado orchard and the majority of the property (47.4-acres of the 53.1-acre site) is mapped as Orchards and Vineyards. The 53.1-acre parcel also contains disturbed Diegan Coastal Sage Scrub, Disturbed Habitat, Mule Fat Scrub, Urban/Developed land, Coast Live Oak Woodland, Coastal and Valley Freshwater Marsh, and non-wetland waters of the U.S. Although a wetland occurs along the northwestern edge of the property, the project has been designed to avoid all of the impacts to the wetlands and a 50-foot wetland buffer has been proposed. The project will permanently impact 175-square feet of "non-wetland waters of the U.S." and temporarily impact 150-square feet of "non-wetland waters of the U.S." Will be mitigated through the establishment of 975-square feet of riparian habitat on-site within proposed open space (a 3:1 ratio).

1.1 Responsible Parties

The owner, The Gildred Companies, is the party responsible for the proposed development project and the subsequent fulfillment of mitigation requirements.

1.2 Location of the Development Project

The Gildred property is located in the northwestern part of the Ramona community in unincorporated San Diego County (see Figure 1). The 53.1-acre parcel is specifically found north of, and adjacent to, Highland Trails Drive and east of, and adjacent to, Highland Valley Road (see Figures 1 and 2). The proposed revegetation areas are located on-site in the existing wetland buffer in the northwest portion of the site in an area designated as proposed open space (see Figure 3).

1.3 Summary of the Overall Development Project with Proposed Mitigation

As mentioned above, the impacts addressed in this revegetation plan are those to non-wetland waters of the U.S. resulting from impacts associated with TPM 21176. Build-out of TPM 21176 will result in the permanent loss of 175-square feet of non-wetland waters of the U.S., and the temporary loss of 150-square feet of non-wetland waters of the U.S. The combined 325-square feet of permanent and temporary impacts are proposed to be mitigated on-site at a 3:1 ratio by establishing 975-square feet of riparian habitat along the existing wetland.

CHAPTER 2 GOAL OF THE COMPENSATORY MITIGATION PROJECT

The ultimate goal of this compensatory mitigation project is to satisfy the mitigation requirements for the impacts to non-wetland waters of the U.S. The areas chosen for the revegetation are adjacent

to existing wetlands within proposed open space. The hope is that the revegetation effort will widen the existing riparian habitat.

2.1 Responsibilities

The project owner, The Gildred Companies, will be responsible for funding the mitigation effort. This will include hiring several professionals to carry out the implementation of this revegetation plan, such as an installation contractor, a Project Biologist, and a landscape maintenance contractor. The installation contractor will be responsible for the successful installation of the plants. The Project Biologist will be responsible for monitoring the success of the revegetation plan and for the reporting requirements. The landscape maintenance contractor will be responsible for maintaining the temporary irrigation system, removing non-native invasive species as deemed necessary by the Project Biologist, and for planting replacement shrubs.

2.2 Type and Area of Habitat to be Established, Revegetated, Restored, Enhanced, and/or Preserved

The type of habitat to be established will be Mule Fat Scrub (Holland Element Code 63310). The two revegetation areas to be planted with the Mule Fat shrubs total approximately 975-square feet. Within these areas, 25 Mule Fat shrubs will be planted on 4-6-foot centers.

2.3 Functions and Values

The revegetation areas are currently occupied by an Avocado orchard. However, these areas are immediately adjacent to existing wetlands and are proposed to be part of the wetland buffer. In choosing this particular location for the revegetation area, it is anticipated that addition of habitat to existing native habitat will provide a wider corridor for wildlife movement along the drainage. This area was also chosen in order to provide more of an actual "buffer" between the wetlands and the proposed development.

2.4 Time Lapse

The proposed monitoring period for this revegetation plan is five years. Assuming that implementation of this plan occurs concurrently with the project impacts, then the time lapse would be five years.

2.5 Cost

Due to the fact that the installation contractor(s), the Project Biologist, and the landscape maintenance contractor(s) have not been chosen yet, the amounts below are estimates and not actual bids. The itemized list of project costs for installation, maintenance and monitoring is as follows:

Site Preparation

<u>Item</u> Temporary Fencing	Quantity 200-feet	Unit Cost \$35/100-feet	<u>Total</u> \$ 70.00
Landscaping:			
<u>Item</u>	Quantity	Unit Cost	<u>Total</u>

<u>Item</u>	<u>Quantity</u>	Unit Cost	<u>Total</u>
Irrigation (automatic)	lump sum	\$ 1,500.00	\$ 1,500.00
Mule Fat (1-gal)	25	\$ 8.00	\$ 200.00
5-year Maintenance	lump sum	\$ 7,500.00	\$ 7,500.00

Monitoring:

<u>Item</u>	<u>Hours</u>	Hourly Rate	<u>Total</u>
Site Visits	85	\$85.00	\$ 7,225.00
Monitoring Reports	80	\$85.00	\$ 6,800.00

TOTAL DIRECT COSTS: \$23,295.00

% PER YEAR CPI RATE, FIVE YEARS : \$ 3,494.25

GRAND TOTAL: \$26,789.25

CHAPTER 3 DESCRIPTION OF THE PROPOSED COMPENSATORY MITIGATION SITE

3.1 Site Selection

The revegetation areas on-site are suitable for a number of reasons, including proximity to location of impacts, comparable soils, and comparable habitats. Mule Fat Scrub currently occurs along the drainage in the northwest portion of the site. This revegetation plan simply proposes to widen and expand this habitat. Logistically, the revegetation areas are located on-site within areas currently occupied by an Avocado orchard, but proposed to be preserved in open space.

Mule Fat (*Baccharis salicifolia*) is considered a "facultative wetland" species meaning that it is usually found in wetlands, but is also found in non-wetlands. Since the proposed location of the Mule Fat plantings is immediately along the edge of the existing Mule Fat Scrub habitat (an elevational difference of approximately 2-4 feet) and the soils are the same within the existing Mule Fat Scrub habitat as the proposed revegetation areas, there is every indication that the Mule Fat shrubs will survive once the temporary irrigation is removed.

3.2 Location and Size of Compensatory Mitigation Site

As mentioned above, the revegetation sites are located on the proposed TPM 21176. Specifically, the revegetation will take place adjacent to the drainage along the northwest edge of the property within proposed open space (see Figure 3). The combined size of the two revegetation areas is approximately 975-square feet.

3.3 Functions and Values

The revegetation areas on-site currently function as an Avocado orchard. These areas are classified as Orchards and Vineyards (Holland, 1986; Element Code 18100). The proposed revegetation areas contain existing Avocado trees with an understory consisting of both non-native and native plant species. A fire in October 2007 burned a portion of these proposed revegetation areas, and as such, its habitat value is low in its present state with a predominance of non-native vegetation (rough estimate of 80% coverage). There is a wildlife movement corridor within the existing Mule Fat Scrub habitat immediately adjacent to the proposed revegetation areas. The intention is to widen the corridor with the planting of the Mule Fat Scrub shrubs, thereby increasing the habitat value of the proposed revegetation areas from a low value Avocado orchard to a high value riparian scrub.

3.4 Jurisdictional Delineation

No formal jurisdictional delineation was performed at the revegetation sites. During the design phase of TPM 21176, the outer edges of the Mule Fat Scrub was identified for the purposes of establishing a 50-foot wetland buffer. The proposed revegetation areas are located within this wetland buffer outside of the existing riparian habitat, but completely within proposed open space.

3.5 Present and Proposed Uses

As can be seen in the aerial in Figure 2, the mitigation areas are currently disturbed, but are located along the edge of the drainage in the northwest portion of the site. The proposed development plans for TPM 21176 are to create four new lots. As can be seen in Figure 3, the mitigation areas are located within proposed open space that will be dedicated as a biological open space easement. One of the conditions of TPM 21176 is to place signs and fencing at the edge of the proposed open space. The fencing will be either split-rail or some other non-barbed wire type with open space signs around each of the home sites.

3.6 Reference Site

A "reference site" is a vegetation stand that has the composition and appearance that is sought with the implementation and maturation of this revegetation plan. For this particular revegetation project, the reference site is immediately adjacent to the mitigation area consisting of Mule Fat Scrub habitat in the drainage. The existing Mule Fat Scrub habitat at the reference site currently functions as a wildlife corridor with tiered layers of native vegetation providing cover within the drainage. The native vegetation covers an estimated 80-85% within the reference site. In addition to its use in

judging success criteria, the reference site will also serve as a reference point to define the extent of drought conditions.

CHAPTER 4 IMPLEMENTATION PLAN FOR THE COMPENSATORY MITIGATION SITE

4.1 Rationale for Expecting Implementation Success

Revegetation will occur adjacent to similar, existing native habitat (see Figure 3). Revegetation in these areas are appropriate in that the species proposed to be planted, Mule Fat, already occurs in and adjacent to this drainage.

4.2 Financial Assurances

The property owner, The Gildred Companies, will be responsible for the funding of this revegetation plan. A revegetation agreement shall be signed and notarized by The Gildred Companies following approval of this revegetation plan.

4.3 Schedule

It is anticipated that implementation of this revegetation plan will occur concurrently with the beginning of the project construction. Project approval is anticipated by the fall of 2016 with project construction beginning in the spring of 2017. Assuming the timing of project approval is correct and project construction and implementation of the revegetation efforts can begin in the spring of 2017, then completion of the monitoring and maintenance period for the revegetation areas would be roughly spring of 2022.

4.4 Site Preparation

Prior to implementation of this revegetation plan, the edge of the existing riparian habitat adjacent to the mitigation sites will need to be fenced with temporary silt fencing (see Figure 3). Implementation of the site preparation phase shall be subject to the following requirements:

- The Project Biologist shall attend a pre-project meeting. The Project Biologist shall make a brief presentation outlining the facts, goals, and restraints inherent in the revegetation program so that all personnel have a working concept of the program.
- The Project Biologist shall designate the limits of work along the edge of the drainage to avoid impacts to the existing native vegetation and to the watercourse. This will include placement of a silt fence along the edge of the revegetation efforts.
- No work shall be conducted during the bird breeding season (15 February to 30 August) of riparian and related bird species. This prohibition is necessary to preclude the potential for

damage to nests and nesting birds, which would be a violation of the Migratory Bird Treaty Act. This prohibition applies unless a qualified biologist has first surveyed the affected reach of the drainage to determine the presence or absence of nesting bird species. If such nesting birds are *not* found, then actions proposed under this plan may proceed within the avian breeding season.

- At the time of planting, all surfaces shall be essentially free of other plant material, and debris.
- The 25 Mule Fat shrub locations shall be excavated and cleared of all non-native vegetation within a 6-foot radius of each future main stem. Planting holes will be dug at a minimum depth of 2-feet, and generally should be two times the diameter of the root ball.
- Surfaces shall be approved by the Project Biologist prior to the planting of the shrubs.

4.5 Planting Plan

Per the mitigation requirements for temporary and permanent impacts to non-wetland waters of the U.S., a total of 25 Mule Fat shrubs will be planted in the mitigation areas. Planting of the shrubs within the mitigation areas shall be accomplished in conformance with the following parameters.

- Planting of the shrubs within the mitigation areas shall be accomplished in substantial conformance with the plan illustrated in Figure 3.
- Only "local" Mule Fat shrubs shall be utilized. The definition of "local" is at the discretion of the Project Biologist. In all cases, only plant species native to San Diego County shall be utilized.
- Prior to the planting of the shrubs, the revegetation areas will be prepared as described in the site preparation section above. Surface preparation shall not involve the use of additives, fertilizers or other components that would favor the growth of non-native, adventive weed species.

4.6 Irrigation Plan

A temporary irrigation system will be necessary for use in the revegetation areas, at least during the early portion of the five-year maintenance and monitoring period. Even though portions of the revegetation areas burned in the October 2007 fire, the irrigation lines still remain mostly intact. It is anticipated that the water needs for this revegetation project will be met by connecting to the existing irrigation system. A simple, above ground layout is anticipated with a drip irrigation system. It is recommended that the irrigation system be maintained in place for the five-year monitoring and maintenance effort in case drought conditions arise during that period that would require irrigation to save the plantings. Watering frequency and duration will be determined and monitored by the Project Biologist and landscape maintenance contractor depending upon rainfall. However, barring

drought conditions, it is anticipated that the irrigation of the shrubs will be discontinued after the second year.

CHAPTER 5 MAINTENANCE DURING MONITORING

5.1 Maintenance Activities

Given the simplistic nature of this revegetation plan, the success of the plan can be enhanced with a modicum of maintenance activities, as follows:

- Removal of weed species (for example non-native grasses and mustards, and the like) that volunteer within six-feet of the shrubs.
- To achieve the overall goal of 100% success, replacement shrubs may be necessary as the five-years of monitoring progresses. The need for any replacement shrubs shall be addressed in the annual monitoring reports.
- Maintenance of the irrigation system will be handled by the landscape maintenance contractor.

5.2 Schedule

The anticipated schedule of the three maintenance activities described above are as follows:

- The removal of weed species should occur four times per year for the first two years, and then only two times per year for the remaining three years of the five-year maintenance and monitoring effort.
- Replacement plantings will occur as needed and will be addressed in the monitoring reports.
- The irrigation maintenance should occur monthly during the first year, quarterly during the second and third years of the revegetation efforts, and then biannually for the last two years of the revegetation program.

CHAPTER 6 MONITORING PLAN FOR THE COMPENSATORY MITIGATION SITE

<u>6.1</u> Performance Standards for Target Dates and Success Criteria

The revegetation areas will be monitored for a five-year period. The anticipated start of the monitoring is Spring 2017 and the anticipated completion date is Spring 2022. Given the simplistic nature of the revegetation plan (i.e. 25 Mule Fat shrubs), success will be based upon 100% survivorship of the 25 shrubs.

6.2 Target Functions and Values

At the end of the maintenance and monitoring program, it is anticipated that the revegetation areas will function as a wetland buffer to the existing wetland in the northwest portion of the site. It is also expected to aid in wildlife movement along the drainage by providing additional width of the corridor, as well as, additional canopy cover.

<u>6.3</u> Target Hydrological Regime

The hydrology of the area is not anticipated to be altered as the revegetation sites are on the banks above the 100-year flood inundation line.

6.4 Target Acreages

For this particular revegetation project, the target acreage amount of Mule Fat Scrub sought for revegetation is 975-square feet containing 25 Mule Fat shrubs.

6.5 Monitoring Methods

Project monitoring will take two forms: monitoring of the initial site preparation and plant installation, and long-term monitoring of the revegetation areas to assure planting success. It is anticipated that the monitoring of the restoration areas will continue for five years, or until such as time as the success criteria have been met, and the County of San Diego has accepted the final monitoring report.

During each walking reconnaissance of the revegetation areas, the Project Biologist shall assess the following:

- The relative success (or lack thereof) of the revegetation efforts. This shall be determined by documenting the growth and survival of each of the 25 Mule Fat shrubs. Specific recommendations necessary to achieve the success criteria at the end of the five year monitoring program shall be made.
- Photo points shall be established to further document the success of the restoration effort over the course of five years.
- Invasion by non-natives within 6-feet of the main stems of the Mule Fat shall be ascertained and quantified. Specific recommendations for the removal of such non-natives shall be made.
- If additional summer or fall watering appears to be appropriate, that recommendation shall be made on a timely basis. This particular issue is potentially independent of the scheduled monitoring dates. The need for supplemental watering may need to be made during single goal site visits in mid-summer and the like, depending on the annual rainfall in any particular year.

Depending on the degree of success (or failure) in any one year, and in part on a number of other conditions controlling on the success of the establishment, the Project Biologist may find it necessary to make recommendations as to the need for replacement shrubs.

6.6 Monitoring Schedule

Monitoring of the site by the Project Biologist shall occur according to the following schedule:

- Periodically throughout the duration of the site preparation phase
- During installation of the 25 Mule Fat shrubs
- Year 1: quarterly
- Year 2: biannually
- Year 3: biannually
- Year 4: annually
- Year 5: annually

6.7 Monitoring Reports

Monitoring reports shall be qualitative and quantitative in content and prepared according to the following schedule:

- Year 1: year-end report
- Year 2: annual
- Year 3: annual
- Year 4: annual
- Year 5: annual

Monitoring reports shall be submitted to the owner and the County of San Diego per the schedule above.

CHAPTER 7 COMPLETION OF COMPENSATORY MITIGATION

At such time as the above outlined success criteria have been met, or after submittal of the fifth monitoring report, the Project Biologist shall contact the County of San Diego to arrange a site visit for sign-off on the completion of the revegetation efforts.

CHAPTER 8 CONTINGENCY MEASURES

Contingency measures need to be established in case the revegetation plan does not progress as anticipated for any number of reasons, including, but not limited to, fire, flood, and plant survival issues. Contingency measures for this particular revegetation plan might include replacement plantings, and relocation of the revegetation area to another site. However, depending upon the specific issue, the Project Biologist will make appropriate recommendations to the County.

8.1 Initiating Contingency Procedures

Implementation of any contingency procedures will be initiated by the Project Biologist by submitting a report to the County of San Diego within two weeks of the incident or issue which causes the need for the initiation of the contingency procedures.

8.2 Alternative Locations for Contingency Compensatory Mitigation

If for any reason, the revegetation efforts fail at the proposed mitigation site, then a planner on the County of San Diego's CEQA Consultant Revegetation Planning list will make an appropriate recommendation depending upon the circumstances surrounding the failed revegetation attempt (i.e. different recommendations for different disasters). In all circumstances, however, the original intent, success criteria, and goals of this revegetation plan will be implemented elsewhere in an area protected via an open space easement.

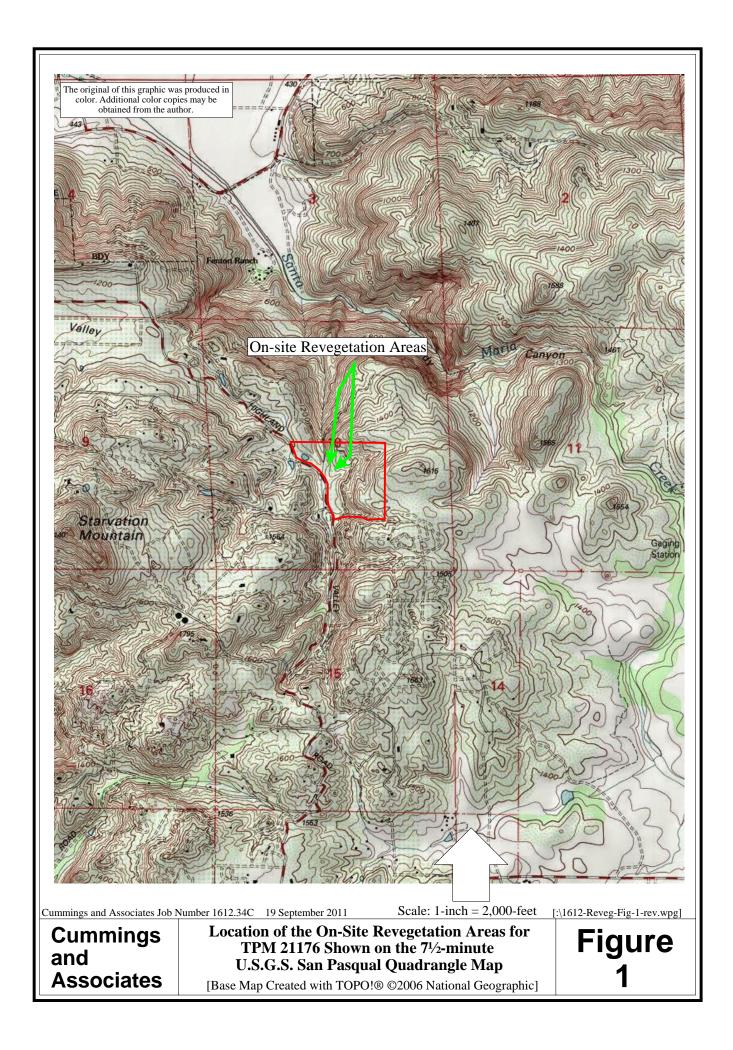
8.3 Funding

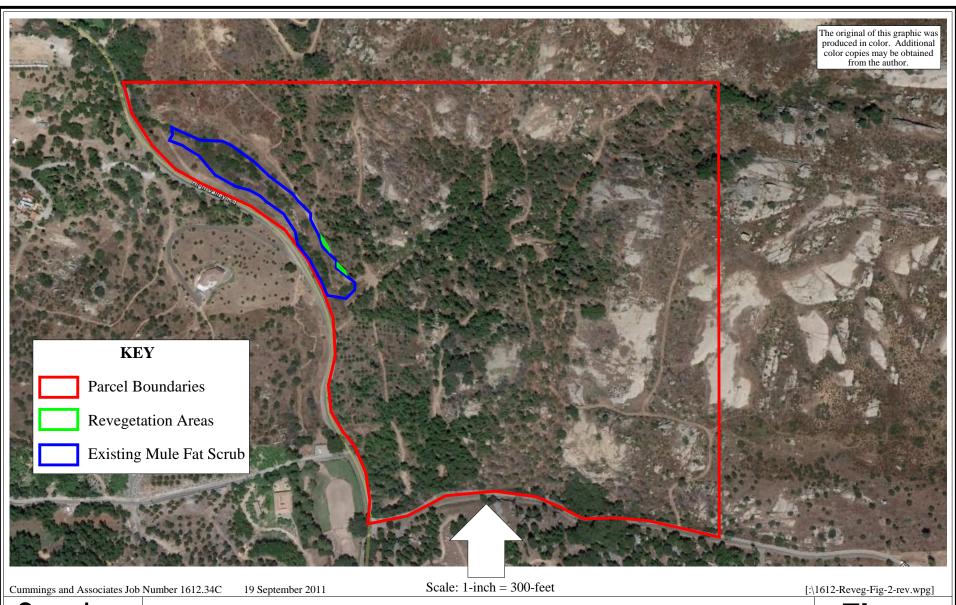
The property owner, The Gildred Companies, would be responsible for the funding of any contingency measures required to achieve the success of this revegetation effort.

CHAPTER 9 REFERENCES CITED AND BIBLIOGRAPHY

- Bowman, Roy H., et al. 1973. Soil Survey of the San Diego Area, California. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.
- Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, California. iii + 155 pp.
- San Diego, County of. 2007. County of San Diego Report Format and Content Requirements for Revegetation Plans. Available from the County's website at http://www.co.san-diego.ca.us/dplu/docs/Revegetation_Report_Formats.pdf.

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Cummings and Associates

Location of the On-Site Revegetation Areas for TPM 21176
Shown on an Aerial Photo

[Base Map Image U.S. Geological Survey; © 2010 Europa Technologies; © 2010 Google]

Figure 2

